THE AMERICAN FARMER,

AND

SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS." . . . . *Virg.*

Vol. II. **BALTIMORE, NOVEMBER, 1846.** **No. 5**

WORK FOR NOVEMBER.

If the drought which has prevailed in this quarter has been general throughout the country, we have no doubt that a very large portion of the autumnal labor, usually executed last month, will have to be performed in this; for, of a certainty, wherever the soil may have been tenacious clay, it must have proved almost impossible, even with the strongest teams, to so plough the earth as to prepare it in a manner fit for seeding. Much of the Wheat may, nevertheless, have been committed to the earth, and may be now well up; but we fear that there is still a great deal of ploughing and seeding to be done. Therefore, to those who may be so unfortunate as not to have got their fall grain in, we would say, that they should avail themselves of the first opportunity, and strain every nerve, to get through with their work. With these introductory remarks we shall proceed to call attention to those things which demand immediate attention.

ON THE FARM.

Sowing Wheat.—If there be any one who may not have gotten in his wheat, to him we would say—*go ahead—do your work thoroughly and well*—procure *good* seed, if that which you have is not of that quality; let it be of an early variety, and of vigorous growth.

As we are upon the subject of wheat culture, we will remark, that the *average* yield in this country is very much below what it ought to be; and that it should be an object with growers to strive on until they raise it far beyond what it now is. We have seen it stated that the average yield in the United States is 18 bushels per acre; we, however, do not believe that it is near that; perhaps not more than two-thirds that quantity; and yet we do most honestly believe that, by attention to supplying the soil with proper manures, mineral, stimulating, as well as nutritive, that it might be raised to *thirty*. We have personal knowledge of two instances where upwards of 52 bushels were raised per acre on a lot of two acres in dimensions, and as we are among those who believe that what has been done once, can be done again, we can see no possible reason to cast the slightest doubt upon our mind but that the average we have named might be reached by a judicious system of culture, and attention to returning to the earth such manures as are calculated to replace those which are extracted from it by the crops of wheat grown thereon. If we were asked, what are the appropriate manures for *wheat?* we would remark, that as lime, potash, phosphoric acid, magnesia, sulphuric acid and nitrogen, are all found by analyses to be among its elemental constituents, that a clover-ley and such mineral manures as would furnish the substances named, would be the right ones to use; and that, as the wheat plant does not require a large amount of either for its supply, that a few bushels of each per acre would answer annually, so that the outlay need not be large for any one crop.

In naming the above substances we desire that what we have said should be received in the light of *suggestions* only; for we are among those who feel great repugnance at advancing anything in the way of an agricultural dogma, seeing, as we do, almost daily, that theories are carried to such extreme lengths as to be more often contradicted than confirmed by facts. And by way of illustration we will mention, that it is opposed to all the best received opinions among agriculturists, to manure wheat ground with stable, other animal, or nutritive manures; the belief being that the effect of such manuring would be to grow a great deal of straw, but very little grain. So confirmed is the mass of wheat-growers in this belief, that he who would advocate such a system as above indicated, would be considered as acting against all the laws of genuine philology. And yet, in England, where the yield is nearly a hundred per cent. greater than with us, the most active means are used to give to the soil such a course

of treatment as is equivalent to a dressing of these so condemned substances. We will cite a couple of instances of successful wheat culture, after the use of such manures. The *first*, we have already spoken of, in the case of the 52 bushels per acre. The manure used in the preparation of the land was *night soil*. The *second*, is the celebrated one of Mr. Whann, of Elkton, Maryland. In his case we will let him tell his own tale. His lot consisted of 10 acres of light sandy loam mould. It had been in Clover and Timothy for some years. He put it the first year in corn, when it produced 850 bushels of good sound corn: ploughed it the next spring, sowed 20 bushels of Barley—product 350 bushels: that fall manured with *stable* manure, ploughed once, and sowed 20 bushels of Red Chaff wheat, harrowed each way; product 422 bushels of wheat, weighing 61lbs. to the bushel. The 2d year, manured with *stable* manure, ploughed once as before, limed, and harrowed in—product 400 bushels—3rd year ploughed a very few furrows around the lot; set fire to, and burnt the *stubble*, ploughed, gave a light coat of *stable* manure, ploughed that in, limed, and harrowed as before—product 350 bushels: 4th year spread on *stable* manure, ploughed, sowed, and harrowed as before—produce 400 bushels: 5th year, covered lightly with *stable* manure, ploughed, limed, sowed, and harrowed in as before—produce 300 bushels. In this latter instance we find the land manured with *stable* manure for 5 successive years, and averaging for the five crops nearly 38 bushels to the acre. These results would seem to put to blush the theory of the anti-animal manurists.

In reverting to these facts we are not governed by the desire of presenting them as *rules* by which wheat growers should be governed; but simply to state them and leave it to others to reflect and draw their own deductions from them. For our part we have never seen the day, when we would have been afraid to use a *moderate* quantity of stimulating manure upon our wheat crop—all things delight to eat, and, according to our humble opinion, the only thing to be deprecated is, the giving too much.

Mr. *Whann* sowed his wheat about the 15th September in each year, and neither suffered from rust or fly, though his neighbors complained that their crops were affected by these destructive enemies.

Rye.—Though the period is late—very late—for this grain, it may still be sown—even up to any period before the ground is frozen. We have sown as late as the 24th November, and made an excellent crop.

By the bye, may it not be the occurrence of rain at the time the Rye plant is in *flower*, that washes away the pollen, prevents impregnation, and consequently lessens the product of grain?

Hogs and Manure.—Among the best manufacturers of manure the hog stands pre-eminent,—hence, it should be the object of every farmer and planter to see that his hog styes are well supplied with such substances as are convertible into the food of plants. Each woodland is a prolific source of the very material to be thrown to the hogs to be worked up into vegetable nutriment. The leaves of every description of trees, the mould of the forest, and the decomposing twigs, pine shatters, and all else of vegetable origin therein to be found, are fertile of those elements which give vitality to, and ensure the healthful growth of crops. Give these to your hogs and they will speedily convert them into good manure, and so commingle them together, as to form a compost so nicely assimilated as to defy the chemist to improve its quality.

Fattening of Hogs.—The sooner you put up your hogs the more easily will they fatten, and for the reasons which we assigned in our last month's number, to which we refer you. Recollect that by feeding *meal* instead of corn you may fatten your pork on twenty-five per cent. less grain.

Fodder and Tops.—Gather and pull these without delay, if you have not already done so—cure them carefully, and put them away out of the weather packing them layer and layer about with your straw.

Cornstalks.—Should you apprehend your supply of fodder and hay insufficient for your cattle, gather your cornstalks so soon as you shall have pulled your corn, and stack them away beyond injury from the weather. If these are cut into half inch pieces, steamed and given to your stock, they will be found to be excellent provender. By steaming them you will not only soften them, thereby rendering them easier of digestion, but prepare the saccharine principle which they contain so as to promptly yield its sustenance to the animal fed thereon.

Orchards.—If you have not already done so, you should give to your orchard trees a painting of the mixture we recommended in our last. All moss and dead bark should be scraped off previously to applying the mixture. If put on with care it will destroy all eggs deposited in the bark, prevent the trees from being injured by ground mice and rabbits, and infuse new life into the bark.

Sheep.—These should have a shed to retire from the weather in during rains and snows, and a yard for exercise. They should be foddered regularly, at stated hours, three or four times a day; be supplied with a trough, under cover, in which they may be daily able to find a mixture of salt and tar, in the proportion of 3 of the former to 1 of the latter.

Transplanting into Orchards.—Now is the time to set out young trees. Be sure to give them a hole large enough to receive their roots without bending.

Milch Cows must have home feeding so as to make up for the deficiencies of the pastures. Salt them, and if you have a supply give them roots or pumpkins.

Pumpkins.—Gather these without bruising them; pack them away in an airy dry place, and feed them out to your milch-cows and hogs.

Young Stock of all kinds must receive kind treatment, additional food, and have an open, warm shed to retire under from rains and snows, and be sure to give them plenty of materials of an absorbent nature to drink up their liquid voidings.

Roots of all kinds should be taken up before being injured by the frosts, and carefully put away so as to be preserved through the winter.

Fences.—A careful inspection of every panel of fence upon the farm should be made, and all found out of order thoroughly repaired.

Barns, Stables, and out-houses of every description, should be whitewashed.

Work-Oxen should be housed of a night, and receive full allowences of long provender, and moderate portions of grain, as it cannot be expected that these useful animals can perform their labor upon the short-commons now to be found in the pastures and woods.

Laying Hens should be provided now, as well as through the winter, with lime to pick, as also with occasional messes of fresh meat of some kind. By attention to these particulars, they may be kept to laying even when the earth is covered with snow; nor must it be forgotten that they require daily allowances of grain of some kind. Corn, buck-wheat, and oats, alternately given them, affords an excellent change of diet, and conduces to the preservation of their health.

Fall Ploughing.—All tenacious clay soils, intended for spring culture, should be ploughed between this and the period of freezing, in order that, by the action of alternate freezing and thawing, their texture may be meliorated and reduced to friability.

Draining Wet Lands.—All wet or moist lands, by being thoroughly drained of their superabundant water, are greatly improved for all purposes of culture; and, as this is a good period to carry on such operations, we commend it to all, to take time by the forelock, and have any fields they may have of the character named, drained and ditched, and especially such as they may intend to put crops in next spring.

By doing such work *now*, they will find themselves able to plough them next spring, two or three weeks earlier than they have been able heretofore.

Such lands, when drained, produces sweeter grasses, grows better grain, yields more of it, matures it sooner, and are much easier worked. Such being the case, all those considerations, which should influence human actions, combine to point to the performance of such labors as matters alike of interest and of duty.

With the memoranda we have sketched, we shall content ourselves for the present, and conclude with the expression of the hope, that, ere spring-seed-time shall have arrived, our country shall have been restored to *peace*, that relation of all others best calculated to further the interest, increase the prosperity of a virtuous people, developes national resources, and send contentment to the home of the industrious.

Since writing the above we have had an old fashioned rain.

THE PARSNIP—ITS CULTURE AND NUTRITIVE PROPERTIES.

There are but few farmers in our country who have not experienced great inconvenience for the want of succulent food for their *milch cows* and *yeaning ewes* in early spring, at that period when winter fodder becomes exhausted, and before the pastures afford sustenance for these useful animals. To endeavor to supply this deficiency shall be the object of this paragraph. In reflecting upon the subject and comparing the relative merits of the several vegetable products usually cultivated in our country, the conviction has been forced upon our mind that there is none better adapted to such purposes than the *parsnip*. In the quantity of product, under the influence of good culture and congenial soil, it will produce as much upon any given quantity of land as any other of the root family, and although its analysis does not shew that it possesses as much *nutritive* matter as does the *potato*, we are very far from being certain, that the *apparent* discrepancy is not owing more to the *form* of the respective *analyses* than to any deficiency of nutritive matter in the parsnip. And in order to make ourself understood, we will give those *analyses* as reported by *Davy*. He says:

"From the analysis of *Einhoff* it appears that 7680 parts of *Potatoes* afford

Of Starch,	1153	parts.
" Fibrous matter analagous to starch,	540	"
" Albumen,	107	"
" Mucilage in a state of saturated Solution,	313	"
	2113	

So that a fourth part of the weight of the potato at least may be considered as nutritive matter."

Davy obtained from 1000 parts *Parsnips*,
90 parts saccharine matter, and
9 parts of mucilage,

Making 99 parts in 1000, or nearly 10 per cent of what we are left to infer as being nutritive matter But is it not fair also, to *infer*, that, if Davy had pushed his analysis a little further, he would have found that the *fibrous* matter of the *parsnip contained*, as did that of the *potato*, "*matter analagous to starch*," or, in other words—nutritive matter—eminently calculated to encourage the growth of flesh, bone and muscle, if not to promote that of *fat* also? We concede to the chemists, in the main, the correctness of the opinion they advance, that there are certain portions of all vegetable products containing what may be termed *fatty* matter, adapted to the generation of *fat*, while other portions are of a character tending to the formation of flesh, bone and muscle, but we are yet to be convinced, that that which will produce the latter will not also produce the former.

While Davy confined himself in his analysis of the *Parsnip*, to the expression of the fluid bodies found in it, and to determining their nature, he omitted to take any account whatever of the *fibrous* and largest constituent part, which doubtless, like the similar substance found in the potato, contains a very essen-

tial portion of matters which are convertible, by the chemical action which they necessarily undergo in the stomach of the animal, into either fat or flesh forming principles, or possibly into both. *Playfair* contends that the sugar, starch, and gum, found in vegetable substances, are not nutritive substances. He is very high authority we are aware—we are aware also, that it is considered heterodox to dissent from his opinions; but in despite of the risk which we run, of being read out of the church-chemical, we will venture the opinion, that these views are carried too far; for it is within the history of our own times, that owing to a scarcity of provisions in the British West Indies, the negroes on the sugar plantations were fed for some six or eight weeks upon *Sugar*, and that the fact was obvious, that they were able, while thus fed, to pursue their daily toils, maintain their strength, and came out of their *sugar-diet* sleek, strong, and hearty. This *fact*, opposed as it is to the *theory* of the chemists of the present day, should go far to shake public confidence in all *theories* which are pushed to extremes. Passing, however, from the consideration of theories unsupported by facts, we will observe, that we feel no hesitation in affirming, that after the 10 per centum of *Sugar* and *mucilage*, which is contained in the parsnip, shall have been expressed, that it is competent, if fed in proper proportions, to carry on the animal economy in healthfulness and vigor, whether regard be had to the increase of the flesh, muscle, bones or fat. This is not opinion unsupported by facts, as we all know, that the pumice of apple, peach or pear, after all the saccharine principle is extracted, is fed advantageously to stock of various kinds, which not only delight in, but thrive and do well upon it.

It may be proper here to remark, that wherever parsnips or other roots are fed out to cattle or sheep, they should always be accompanied by portions of dry food, as hay or fodder of some kind, to correct any ill effects which might otherwise result from the succulent nature of roots.

There is one quality connected with the nature of parsnips which renders them a most available spring feed. They may be left in the ground where they may be grown, all winter, without being the least injured. This operates as a great saving of labor in the fall, when potatoes, turnips, beets, carrots, and indeed, all other roots have to be dug and buried, or housed in some dry cellar to preserve them from the effects of frost. Thus left out, the Parsnip will be found in spring, when they may be wanted to be fed out to the stock, just as good as they were before the frosts of winter set in.

As to the number of bushels of Parsnips which may be grown on an acre of land, that depends entirely upon the quality of the land, the kind and quality of manure, the manner in which the ground may be ploughed and put into fine tilth, and upon the cleanliness of the after culture. All the circumstances to which we have alluded concurring a thousand bushels of Parsnips in a favorable season may be grown on an acre—we say may be, because more than that quantity has been raised on that quantity of land. It is, however safer for those who may design to enter into their culture to fix their expectations upon 500 bushels, as that quantity we think, with ordinary good tending, may be set down as an average yield.

This is not the time to undertake their culture, but as we like that farmers should look well ahead, we revert to the subject *now*, in order that they may be providing the manure, and selecting a good piece of deep *sandy-loam*, to begin the culture of an acre or two of Parsnips next spring. Parsnips delight best in a deep soil of the character named above—the kind of manure best adapted to their growth, is a compost formed of 7 parts well rotted stable dung and 1 of ashes—the quantity may be set down at 10 double-horse cart loads, to which should be added 1 bushel of Plaster and two of ground bones, the whole to be well mixed together, and suffered to lie in pie two or three weeks before being used. If the bones were moistened with 10 pounds of sulphuric acid diluted with 100 pounds of water, and permitted to digest a few days before being put into the compost, their effects would be more prompt, as they would then immediately give out their nitrogen as well as phosphoric acid.

DESTRUCTION OF SASSAFRAS—APPLICATION OF BONE MANURE.

To the Editor of the American Farmer.

I have noticed latterly a disposition on the part of your subscribers to fly to you in their difficulties, and under the hope that you or some of your numerous readers may relieve me from mine, is the object of my present communication.

I have a field of about 15 acres, divided into two parts, on one half I have applied 60 bushels of lime and 8 bushels of bone, on the other 80 bushels of lime, 12 bushels of bone, and 200 lbs. of Guano per acre, and to each acre a peck of clover seed. The first year there was a good yield of grass, the second the clover gave place to innumerable small sassafras, that have in many parts of the field taken complete possession and rendered it at present valueless. The ground previous to the above application, was very poor, but no appearance of sassafras. What rotation of crops will be most effectual towards their extirpation?

I notice that many who recommend the use of Bone, (yourself among the number) advise that it should be mixed with earth, and be allowed to ferment before sowing; as this is not the common practice here, I would ask whether it is not as effective sowed out of the bag and harrowed in immediately?

I have seen some experiments detailed, that have been lately made with nitrate and sulphate of soda.

In 1843, I used a mixture of 1-3 nitrate to 2-3 sulphate on a variety of crops, following strictly the directions laid down in Johnson's Agricultural Chemistry, without experiencing a shadow of benefit, and in some case a positive injury. I mention this to my brother farmers as a caution to touch lightly.

I am now experimenting with salt, on my wheat,

at the rate of 4 bushels per acre, and you may possibly hear the result from a

MONTGOMERY FARMER.

In reply to the inquiries of our Correspondent, "*Montgomery Farmer*," we would remark:

1st. The best method we know of to destroy Sassafras Bushes, is to cut them down in the spring, and pasture the lot or field infested with them with sheep and cattle. These animals are very fond of the young sprouts, and eat them as fast as formed, so that the bushes are kept in a continual state of bleeding, which so exhausts their principles of vitality as to ultimately kill them. A field thus treated, for two or three years, will be rid of the pest, and may be again ploughed and restored to culture, with the advantage of being improved in fertility, by the droppings of the stock while depasturing thereon. As an auxiliary means of fertilization, we would, each spring, early, apply a bushel of plaster, per acre. By this means the ammonia would be fixed, and washed into the soil.

2d. *Bone manure*, sown out of a bag, without any admixture with other substance, would be as effective, *ultimately*, as though it had been mixed. It would probably last longer. The object gained by mixing and fermentation, is, to resolve the cartilagenous parts of the bones, and bring them into more *immediate* action. The object gained by dissolving bones in sulphuric acid, is similar, though acting in a two-fold way—it not only dissolves the membraneous portions of the bones, but the mineral parts, also, and prepares the phosphates so as to become immediately the food of plants; thereby anticipating the slower action consequent upon the decomposing processes of heat and moisture to be found in the earth.

3rd. The *Nitrates*, which our friend speaks of, are, in our opinion, better adapted to grasses than grain.

The *experiments* which our correspondent is making with *salt* on *Wheat*, will doubtless prove interesting, and thanking him for his present communication, in advance, we bespeak from him a paper upon the efficiency, or inefficiency, which ever it may turn out to be, of his application of Salt to wheat.

To our readers. If any should know a *better* plan of destroying Sassafras bushes than we have pointed out, we should thank him to favor us with a paper upon the subject, in order that our correspondent may avail himself of it.

The cultivation of rice has been attempted on the salt lands near the mouth of the Rhone, and has met with perfect success. This cultivation, whilst yielding great produce, has the additional advantage of entirely freeing the land of the salt. This land is alluvial soil of the first quality, and is now made excellent for all kinds of production. This year three hundred hectares (a measure equal to two acres seventy-five square poles) have been turned to rice fields, and this example will be promptly followed. Thus, in the space of a few months, thanks to this fortunate attempt, the agriculture of France will have been enriched by a new product, and the lands of the Delta of the Rhone will have increased ten times their value.—*French Paper.*

For the American Farmer.

PHILADELPHIA CO. AGRICULTURAL FAIR.

Mr. Editor,—On the last day of September and 1st of October, I had the pleasure of attending the Philadelphia Agricultural Society's meeting held at the Rising Sun, three miles from the city. There was a large assemblage of people, and everything passed off most happily—As a lover of agriculture and all that is connected with the pursuit, I was much delighted with all I saw and heard.

The show of cattle was very fine—specimens of the lordly Durham from the superb herds of Messrs Gowen, Kelly, Smith, Garret and others—many of the mixed breeds were also there, showing careful breeding, and high excellence as dairy cows—one cow with *two* calves, altho' one calf looked half a month older than the other—Mr. Physic had some remarkable Alderney cows—Judge Longstreet, some very fine *native Devonshire cattle*. The fine stock, and the taste displayed by Mr. George Blight, in decorating the public stand, commanded deservedly the admiration of every person. The Leicester Sheep were fine, and the South-Downs exhibited by A. Clement, esq., were the finest I ever saw, and cannot be surpassed in the Union.

The show of Hogs was very fair, being good specimens of the pure Chester county and a cross of that breed and the Berkshire.

There was a noble display of Agricultural machinery.

POULTRY.—Some of the largest and finest ever seen—white Turkies—white top knot Ducks—ditto chickens. West India and East India chickens—Buck's county, &c. &c.

Horses.—Twelve or more superb stallions, and fine brood mares for the road and for slow-draft. One mare was exhibited which it was stated had walked a mile in 7 minutes, trotted it in 2 m. 54 sec. and then hauled a ton of coal 1 mile in 12 minutes. The show of young horses was nothing extra.

Butter.—This article was capital, but the richest, finest flavored and of the most beautiful color, that ever your humble servant had the pleasure to eat was that which Mr. Physic offered, as made from the Alderey cows, and which of course received the premium—Mr. Ford offered some which was packed in June, and was so fine that at most cattle shows, certainly in Maryland, would have taken a premium as butter just fresh made, it was so nice, so fine, so fresh, and so sweet.

The association had a splendid dinner each day, at which every gentleman stranger from abroad was waited upon and invited to join them, and the best seats were reserved at table for their invited guests. The table groaned with every luxury of the season, wine flowed, champaigne corks popped, wit like the wine sparkled, fun was plenty, mirth and cheerfulness presided at the elegant repast, while toasts were given and with becoming cheers, and other tokens of applause were received by the large crowd. Among the toasts was one by the acting President, Mr. A. Roberts, (who presided with urbanity and great dignity,) in which he complimented Maryland. This was responded to by a Marylander in a short speech and toast; and in a toast by Col. C. of Md. which was received with applause.

When I went to Pennsylvania, my mind was imbued with all those foolish prejudices that Southerners have against the North—I expected to meet every other man a rank Abolitionist—to see a hard-faced, plain, straight-coated set of grave Quakers with white hats and broad-rims, cold as element, and distant,

AGRICULTURE.

The Subscriber will be prepared to furnish the agriculturists with every kind of SALT or COMPOST, required by the different kinds of grain or vegetables, by the large or small quantities, with directions for their applications. Soils visited and analysed by the year or by the single analyses and opinion. W. BAER, Agricultural Chemist,
Oct 1 No. 2 N. Liberty st., Baltimore.

NOTICE.

CLAIRMONT NURSERY,
Near Baltimore, Md.

We again take pleasure in notifying our various customers and the public, that the time has nearly arrived for transplanting Trees, &c., and consider our stock of fruit trees superior to what they have ever been before both in quality and in quantity, as we have had an opportuty of testing their correctness from our standard Trees which are extensively bearing.—We deem it unnecessary to enumerate the various kinds of fruit and ornamental Trees, Shrubbery, Roses, Green House plants, Flower roots, &c. &c., suffice it to say our Nursery and Seed Garden occupies about 100 acres of the Farm, and our determination is to give satisfaction if possible, both in price and quality—printed Catalogues, giving our prices, will be be sent gratis; where large quantities are wanted considerable discount will be made. Letters addressed to R. Sinclair, Jr. & Co., Light St., Baltimore, or the subscribers, Balto. Md. will meet with prompt attention.

Persons wishing to act as Agents will please let us hear from them. Oct 1 SINCLAIR & CORSE.

FRUIT AND ORNAMENTAL TREES, &c.—The subscriber has made arrangements by which he is enabled to supply, with promptness, all orders for FRUIT & ORNAMENTAL TREES, and believes he can, with all confidence, recommend them to his friends, as equal at least, to any to be had from any nursery in the U. S. and at prices equally as low as any of similar sizes, kinds and qualities :

Apple Trees, a large variety, at 25 cts each for 12 or less; over 12 and less than 50, 20 cts; or $18 per 100
Pear do. a very fine assortment, 37 c. each; some rare kinds 50
Peach do. a very large stock and great variety, 25c each for 12 or less; 18 c each, over 12 and less than 50; and $15 per 100
Plums, the choicest varieties, 50c each
Cherries, 37 to 50c each, many sorts, some very fine
Apricots, $4 per doz; per 100, 15 per ct. off
Nectarines, 37c each, or $25 per 100
Almonds, 25 to 37c each—Quinces 37c each or $3 per doz
Currants, 20c each, $2 per doz. or $10 per 100
Raspberries 6 to 20c each; 1to$2 per doz; 6to$15 per 100
Figs, 50c each—Gooseberries 20 to 25c; or $3 per doz
Walnuts, Chesnuts, Filberts and Hazlenuts. 25 to 50c each
Strawberries, fine sorts, 1to$2 per 100; or 25 to 50c per doz
Whortleberries, Cranberries, Grapes, Scions
Hardy Ornamental Forest Trees, Shrubs, Evergreens, Vines and Creepers, twining and upright Honeysuckles
Roses, a great variety; Chrysanthemums, Paeonies
Dahlias, a splendid assortment; Pinks, Hydrangias, Geraniums
Esculent Roots, bulbous and tuberous rooted Plants, &c.

They will be packed and labeled by experienced hands, and delivered at any of the wharves or rail road depots in the city. A small charge will be made for packing. S. SANDS,
Office of American Farmer, 122 Baltimore st.

☞Who keeps on sale a general assortment of *GARDEN SEEDS*, Books on Agriculture, Horticulture, Floriculture, on Cattle, Horses, Sheep, on Guano, and other Manures, &c. o 1

A SITUATION is wanted for a German, who has been accustomed to farm work and the management of horses, and who is well spoken of by his present employer, who having no further use for his services, is anxious to see him provided with a home.—Apply at this Office. Oct 1

WANTED, 30 or 40 good EWES, to breed from; crosses of some improved breed on the native, would answer—or good young native Ewes. Also, a good brood Sow.

For Sale a fine young AYRSHIRE BULL, a few weeks old—price $12. Apply at this Office.

Also, a Buck, 1 year old, got by a full bred South Down Buck, bought of Mr. Bement, of Albany, and out of a half-bred Bakewell,or Leicester ewe—Price $12,delivered in Baltimore.

Also, a South Down Buck, with a small cross of Leicester, a very fine animal,—Price $30. Apply to S. SANDS, office of the American Farmer. oc 1

BOMMER'S METHOD FOR MAKING MANURE—The subscriber has been appointed by Mr. Bommer, his agent for the Southern States, and will dispose of the Books, with the right to use them, for any sized farm, at $5 each. Address (post paid) ml SAML. SANDS, office of "A. Farmer."

THE SUBSCRIBER takes pleasure in returning thanks to the many gentlemen who have favoured him with their MILL-WORK; also to the farmers and planters for their liberal support in the Machine line, and would respectfully inform them, that his endeavors to please will continue unremitting. He is prepared at all times to build any of the following kinds of MILLS, Overshot, Pitch Back, Breast, Undershot, Reacting, Steam, Wind, Tide, Horse-power, or Tread Mills; and having the best of workmen employed at pattern and machine making, he can at all times furnish the best articles at the lowest prices, such as Horsepowers, Pettigrew Shellers, Murray's Shellers, 4 kinds hand and power Shellers, portable Mills adapted to any power, Corn and Cob grinders, Straw, Hay and Fodder Cutters, Carry-log and Mill Screws; also manufactures Hoisting Machines, Hoisting Cranes, Pile Drivers, Turning Lathes and Steam Engines; and any kind of Machine, Model or Mill-work built to order. Any kind of Castings and Smith-work at the lowest prices. I warrant all Mills planned and erected by me to operate well. JAS. MURRAY,
Millwright, York near Light st. Baltimore.

He has also for sale, the followtng second hand Machinery: 1 8-horse Steam Engine and Boiler, 2 pair 4 ft 6 in. French burr Millstones, with all the gearing; 2 pair 3 ft 6 in. French burr Millstones, with all the gearing; and some Saw Mill work—the whole are good, and any or all of the above will be sold low. o1

"Spade labour, the perfection of good husbandry."

PULVERIZATION.

DECOMPOSITION.

THE "PREMIUM PLOUGH"—In PROUTY & MEARS'S 5 1-2, "confessedly the best PLOUGH known in this country for beauty of work and pulverizing the soil," we have combined the most perfect swing as well as wheel Plough, connected also with the principles of self-sharpening and easy draught, which with the facility of turning it into a Tandem 3, 4, or 5 horses abreast Plough in a minute of time, renders it a NE PLUS ULTRA of perfection. During the past season it received the first premium for the BEST PLOUGH, at Philadelphia; a first, second and third premium at New Castle county, Del.; the Imperial Medal of Russia, of massive gold, value $300; and at Prince George's society, Md. the highest testimony of approbation, in not permitting it to compete, having already received the first premium as "the *BEST PLOUGH* for general purposes." Their one-horse Plough No. 214, is strongly recommended for light soils and horticultural purposes, being built after the same model, self-sharpening, and carrying a sod furrow 10 in wide with great ease and precision.

For sale at No. 55 LIGHT ST. Baltimore, MR. EZRA WHITMAN being appointed sole Agent for sales in Baltimore and vicinity. Fe 1

FARM MANAGER.—Wanted a situation as manager or agent on a large farm or estate by a farmer who has been educated on the border counties of England and Scotland, and upwards of three years in this country. Apply to
S. SANDS, Office of the American Farmer.

CONTENTS OF THE OCTOBER NO.

Farm work for Oct	97	Analysis of Soot	19
Turning in green crops	100	Lime, essential for wheat	"
Colman's European Tour		Sea Weed—Dead Animals—	
No 7	101	Sheep Sheds—Rearing of	
Browne's trees of America	102	Calves—Agricultural rules	15
Enquires of L. R. and reply	103	Clairmont Nursery,	19
L. F. B. on liming,&c.	104	Garden Work for Oct.	"
R. H. on Peruvian corn, &c	105	Black Tartarian Cherry, with	
Ploughing Match in Del.	"	a cut	17
Address of P. H. M'Leod	106	Mildew in Grapes	19
Cincinnatus on Farm building, with an engraving	109	Lt. Porter, on the Potato rot	19
Corn Meal in England	112	Potato disease in England and Ireland	"
Notice to those indebted—		Shortness of the cotton crop	"
of Premiums	"	The Potato Murrain, description of, with several drawings	19
Meeting of Md. Far. Club	"	The Java Bantum (cut)	12
Notices—of the Potato rot; of the American Institute Fair; of the communications of J. F. S.; of Mr. Welch's marl; of N. Castle, Montgomery and P. Geo's Fairs; Presents to the Editor; compliments to do.; the European crops; of the tobacco crop; of Mr. Gowen's Agricultural School	112, 113	Work among the Flowers	13
		Verbenas, Feast and Buist's	"
		Ipomæ Learii, a climber	"
		Wine without Alcohol	"
		Miss Beecher on bread making, &c.	19
Do. of Harford Co. blue limestone; Mr. Downes' prolific wheat	114	Montgomery Co. Ag. Fair	19
		Barrell's Corn Sheller(cut)	19
		Death of Col M'Donald	"
		Markets,	"
		Meteorological Table	19

THE

AMERICAN FARMER,

AND

SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS." . . . . *Virg.*

Vol. II. **BALTIMORE, NOVEMBER, 1846.** **No. 5**

WORK FOR NOVEMBER.

If the drought which has prevailed in this quarter has been general throughout the country, we have no doubt that a very large portion of the autumnal labor, usually executed last month, will have to be performed in this; for, of a certainty, wherever the soil may have been tenacious clay, it must have proved almost impossible, even with the strongest teams, to so plough the earth as to prepare it in a manner fit for seeding. Much of the Wheat may, nevertheless, have been committed to the earth, and may be now well up; but we fear that there is still a great deal of ploughing and seeding to be done. Therefore, to those who may be so unfortunate as not to have got their fall grain in, we would say, that they should avail themselves of the first opportunity, and strain every nerve, to get through with their work. With these introductory remarks we shall proceed to call attention to those things which demand immediate attention.

ON THE FARM.

Sowing Wheat.—If there be any one who may not have gotten in his wheat, to him we would say—*go ahead—do your work thoroughly and well*—procure *good* seed, if that which you have is not of that quality; let it be of an early variety, and of vigorous growth.

As we are upon the subject of wheat culture, we will remark, that the *average* yield in this country is very much below what it ought to be; and that it should be an object with growers to strive on until they raise it far beyond what it now is. We have seen it stated that the average yield in the United States is 18 bushels per acre; we, however, do not believe that it is near that; perhaps not more than two-thirds that quantity; and yet we do most honestly believe that, by attention to supplying the soil with proper manures, mineral, stimulating, as well as nutritive, that it might be raised to *thirty*. We have personal knowledge of two instances where upwards of 52 bushels were raised per acre on a lot of two acres in dimensions, and as we are among those who believe that what has been done once, can be done again, we can see no possible reason to cast the slightest doubt upon our mind but that the average we have named might be reached by a judicious system of culture, and attention to returning to the earth such manures as are calculated to replace those which are extracted from it by the crops of wheat grown thereon. If we were asked, what are the appropriate manures for *wheat?* we would remark, that as lime, potash, phosphoric acid, magnesia, sulphuric acid and nitrogen, are all found by analyses to be among its elemental constituents, that a clover-ley and such mineral manures as would furnish the substances named, would be the right ones to use; and that, as the wheat plant does not require a large amount of either for its supply, that a few bushels of each per acre would answer annually, so that the outlay need not be large for any one crop.

In naming the above substances we desire that what we have said should be received in the light of *suggestions* only; for we are among those who feel great repugnance at advancing anything in the way of an agricultural dogma, seeing, as we do, almost daily, that theories are carried to such extreme lengths as to be more often contradicted than confirmed by facts. And by way of illustration we will mention, that it is opposed to all the best received opinions among agriculturists, to manure wheat ground with stable, other animal, or nutritive manures; the belief being that the effect of such manuring would be to grow a great deal of straw, but very little grain. So confirmed is the mass of wheat-growers in this belief, that he who would advocate such a system as above indicated, would be considered as acting against all the laws of genuine philology. And yet, in England, where the yield is nearly a hundred per cent. greater than with us, the most active means are used to give to the soil such a course

of treatment as is equivalent to a dressing of these so condemned substances. We will cite a couple of instances of successful wheat culture, after the use of such manures. The *first*, we have already spoken of, in the case of the 52 bushels per acre. The manure used in the preparation of the land was *night soil*. The *second*, is the celebrated one of Mr. Whann, of Elkton, Maryland. In his case we will let him tell his own tale. His lot consisted of 10 acres of light sandy loam mould. It had been in Clover and Timothy for some years. He put it the first year in corn, when it produced 850 bushels of good sound corn: ploughed it the next spring, sowed 20 bushels of Barley—product 350 bushels: that fall manured with *stable* manure, ploughed once, and sowed 20 bushels of Red Chaff wheat, harrowed each way; product 422 bushels of wheat, weighing 61lbs. to the bushel. The 2d year, manured with *stable* manure, ploughed once as before, limed, and harrowed in—product 400 bushels—3rd year ploughed a very few furrows around the lot; set fire to, and burnt the *stubble*, ploughed, gave a light coat of *stable* manure, ploughed that in, limed, and harrowed as before—product 350 bushels: 4th year spread on *stable* manure, ploughed, sowed, and harrowed as before—produce 400 bushels: 5th year, covered lightly with *stable* manure, ploughed, limed, sowed, and harrowed in as before—produce 300 bushels. In this latter instance we find the land manured with *stable* manure for 5 successive years, and averaging for the five crops nearly 38 bushels to the acre. These results would seem to put to blush the theory of the anti-animal manurists.

In reverting to these facts we are not governed by the desire of presenting them as *rules* by which wheat growers should be governed; but simply to state them and leave it to others to reflect and draw their own deductions from them. For our part we have never seen the day, when we would have been afraid to use a *moderate* quantity of stimulating manure upon our wheat crop—all things delight to eat, and, according to our humble opinion, the only thing to be deprecated is, the giving too much.

Mr. *Whann* sowed his wheat about the 15th September in each year, and neither suffered from rust or fly, though his neighbors complained that their crops were affected by these destructive enemies.

Rye.—Though the period is late—very late—for this grain, it may still be sown—even up to any period before the ground is frozen. We have sown as late as the 24th November, and made an excellent crop.

By the bye, may it not be the occurrence of rain at the time the Rye plant is in *flower*, that washes away the pollen, prevents impregnation, and consequently lessens the product of grain?

Hogs and Manure.—Among the best manufacturers of manure the hog stands pre-eminent,—hence, it should be the object of every farmer and planter to see that his hog styes are well supplied with such substances as are convertible into the food of plants. Each woodland is a prolific source of the very material to be thrown to the hogs to be worked up into vegetable nutriment. The leaves of every description of trees, the mould of the forest, and the decomposing twigs, pine shatters, and all else of vegetable origin therein to be found, are fertile of those elements which give vitality to, and ensure the healthful growth of crops. Give these to your hogs and they will speedily convert them into good manure, and so commingle them together, as to form a compost so nicely assimilated as to defy the chemist to improve its quality.

Fattening of Hogs.—The sooner you put up your hogs the more easily will they fatten, and for the reasons which we assigned in our last month's number, to which we refer you. Reccollect that by feeding *meal* instead of corn you may fatten your pork on twenty-five per cent. less grain.

Fodder and Tops.—Gather and pull these without delay, if you have not already done so—cure them carefully, and put them away out of the weather packing them layer and layer about with your straw.

Cornstalks.—Should you apprehend your supply of fodder and hay insufficient for your cattle, gather your cornstalks so soon as you shall have pulled your corn, and stack them away beyond injury from the weather. If these are cut into half inch pieces, steamed and given to your stock, they will be found to be excellent provender. By steaming them you will not only soften them, thereby rendering them easier of digestion, but prepare the saccharine principle which they contain so as to promptly yield its sustenance to the animal fed thereon.

Orchards.—If you have not already done so, you should give to your orchard trees a painting of the mixture we recommended in our last. All moss and dead bark should be scraped off previously to applying the mixture. If put on with care it will destroy all eggs deposited in the bark, prevent the trees from being injured by ground mice and rabbits, and infuse new life into the bark.

Sheep.—These should have a shed to retire from the weather in during rains and snows, and a yard for exercise. They should be foddered regularly, at stated hours, three or four times a day; be supplied with a trough, under cover, in which they may be daily able to find a mixture of salt and tar, in the proportion of 3 of the former to 1 of the latter.

Transplanting into Orchards.—Now is the time to set out young trees. Be sure to give them a hole large enough to receive their roots without bending.

Milch Cows must have home feeding so as to make up for the deficiencies of the pastures. Salt them, and if you have a supply give them roots or pumpkins.

Pumpkins.—Gather these without bruising them; pack them away in an airy dry place, and feed them out to your milch-cows and hogs.

Young Stock of all kinds must receive kind treatment, additional food, and have an open, warm shed to retire under from rains and snows, and be sure to give them plenty of materials of an absorbent nature to drink up their liquid voidings.

Roots of all kinds should be taken up before being injured by the frosts, and carefully put away so as to be preserved through the winter.

Fences.—A careful inspection of every panel of fence upon the farm should be made, and all found out of order thoroughly repaired.

Barns, Stables, and out-houses of every description, should be whitewashed.

Work-Oxen should be housed of a night, and receive full allowances of long provender, and moderate portions of grain, as it cannot be expected that these useful animals can perform their labor upon the short-commons now to be found in the pastures and woods.

Laying Hens should be provided now, as well as through the winter, with lime to pick, as also with occasional messes of fresh meat of some kind. By attention to these particulars, they may be kept to laying even when the earth is covered with snow; nor must it be forgotten that they require daily allowances of grain of some kind. Corn, buck-wheat, and oats, alternately given them, affords an excellent change of diet, and conduces to the preservation of their health.

Fall Ploughing.—All tenacious clay soils, intended for spring culture, should be ploughed between this and the period of freezing, in order that, by the action of alternate freezing and thawing, their texture may be meliorated and reduced to friability.

Draining Wet Lands.—All wet or moist lands, by being thoroughly drained of their superabundant water, are greatly improved for all purposes of culture; and, as this is a good period to carry on such operations, we commend it to all, to take time by the forelock, and have any fields they may have of the character named, drained and ditched, and especially such as they may intend to put crops in next spring.

By doing such work *now*, they will find themselves able to plough them next spring, two or three weeks earlier than they have been able heretofore.

Such lands, when drained, produces sweeter grasses, grows better grain, yields more of it, matures it sooner, and are much easier worked. Such being the case, all those considerations, which should influence human actions, combine to point to the performance of such labors as matters alike of interest and of duty.

With the memoranda we have sketched, we shall content ourselves for the present, and conclude with the expression of the hope, that, ere spring-seed-time shall have arrived, our country shall have been restored to *peace*, that relation of all others best calculated to further the interest, increase the prosperity of a virtuous people, developes national resources, and send contentment to the home of the industrious.

Since writing the above we have had an old fashioned rain.

THE PARSNIP—ITS CULTURE AND NUTRITIVE PROPERTIES.

There are but few farmers in our country who have not experienced great inconvenience for the want of succulent food for their *milch cows* and *yeaning ewes* in early spring, at that period when winter fodder becomes exhausted, and before the pastures afford sustenance for these useful animals. To endeavor to supply this deficiency shall be the object of this paragraph. In reflecting upon the subject and comparing the relative merits of the several vegetable products usually cultivated in our country, the conviction has been forced upon our mind that there is none better adapted to such purposes than the *parsnip*. In the quantity of product, under the influence of good culture and congenial soil, it will produce as much upon any given quantity of land as any other of the root family, and although its analysis does not shew that it possesses as much *nutritive* matter as does the *potato*, we are very far from being certain, that the *apparent* discrepancy is not owing more to the *form* of the respective *analyses* than to any deficiency of nutritive matter in the parsnip. And in order to make ourself understood, we will give those *analyses* as reported by *Davy*. He says:

"From the analysis of *Einhoff* it appears that 7680 parts of *Potatoes* afford

Of Starch,	1153	parts.
" Fibrous matter analagous to starch,	540	"
" Albumen,	107	"
" Mucilage in a state of saturated Solution,	313	"
	2113	

So that a fourth part of the weight of the potato at least may be considered as nutritive matter."

Davy obtained from 1000 parts *Parsnips*,
90 parts saccharine matter, and
9 parts of mucilage,

Making 99 parts in 1000, or nearly 10 per cent of what we are left to infer as being nutritive matter But is it not fair also, to *infer*, that, if Davy had pushed his analysis a little further, he would have found that the *fibrous* matter of the *parsnip contained*, as did that of the *potato*, "*matter analagous to starch*," or, in other words—nutritive matter—eminently calculated to encourage the growth of flesh, bone and muscle, if not to promote that of *fat* also? We concede to the chemists, in the main, the correctness of the opinion they advance, that there are certain portions of all vegetable products containing what may be termed *fatty* matter, adapted to the generation of *fat*, while other portions are of a character tending to the formation of flesh, bone and muscle, but we are yet to be convinced, that that which will produce the latter will not also produce the former.

While Davy confined himself in his analysis of the *Parsnip*, to the expression of the fluid bodies found in it, and to determining their nature, he omitted to take any account whatever of the *fibrous* and largest constituent part, which doubtless, like the similar substance found in the potato, contains a very essen-

tial portion of matters which are convertible, by the chemical action which they necessarily undergo in the stomach of the animal, into either fat or flesh forming principles, or possibly into both. *Playfair* contends that the sugar, starch, and gum, found in vegetable substances, are not nutritive substances. He is very high authority we are aware—we are aware also, that it is considered heterodox to dissent from his opinions; but in despite of the risk which we run, of being read out of the church-chemical, we will venture the opinion, that these views are carried too far; for it is within the history of our own times, that owing to a scarcity of provisions in the British West Indies, the negroes on the sugar plantations were fed for some six or eight weeks upon *Sugar*, and that the fact was obvious, that they were able, while thus fed, to pursue their daily toils, maintain their strength, and came out of their *sugar-diet* sleek, strong, and hearty. This *fact*, opposed as it is to the *theory* of the chemists of the present day, should go far to shake public confidence in all *theories*, which are pushed to extremes. Passing, however, from the consideration of theories unsupported by facts, we will observe, that we feel no hesitation in affirming, that after the 10 per centum of *Sugar* and *mucilage*, which is contained in the parsnip, shall have been expressed, that it is competent, if fed in proper proportions, to carry on the animal economy in healthfulness and vigor, whether regard be had to the increase of the flesh, muscle, bones or fat. This is not opinion unsupported by facts, as we all know, that the pumice of apple, peach or pear, after all the saccharine principle is extracted, is fed advantageously to stock of various kinds, which not only delight in, but thrive and do well upon it.

It may be proper here to remark, that wherever parsnips or other roots are fed out to cattle or sheep, they should always be accompanied by portions of dry food, as hay or fodder of some kind, to correct any ill effects which might otherwise result from the succulent nature of roots.

There is one quality connected with the nature of parsnips which renders them a most available spring feed. They may be left in the ground where they may be grown, all winter, without being the least injured. This operates as a great saving of labor in the fall, when potatoes, turnips, beets, carrots, and indeed, all other roots have to be dug and buried, or housed in some dry cellar to preserve them from the effects of frost. Thus left out, the Parsnip will be found in spring, when they may be wanted to be fed out to the stock, just as good as they were before the frosts of winter set in.

As to the number of bushels of Parsnips which may be grown on an acre of land, that depends entirely upon the quality of the land, the kind and quality of manure, the manner in which the ground may be ploughed and put into fine tilth, and upon the cleanliness of the after culture. All the circumstances towhich we have alluded concurring a *thousand* bushels of Parsnips in a favorable season may be grown on an acre—we say may be, because more than that quantity has been raised on that quantity of land. It is, however safer for those who may design to enter into their culture to fix their expectations upon 500 bushels, as that quantity we think, with ordinary good tending, may be set down as an average yield.

This is not the time to undertake their culture, but as we like that farmers should look well ahead, we revert to the subject *now*, in order that they may be providing the manure, and selecting a good piece of deep *sandy-loam*, to begin the culture of an acre or two of Parsnips next spring. Parsnips delight best in a deep soil of the character named above—the kind of manure best adapted to their growth, is a compost formed of 7 parts well rotted stable dung and 1 of ashes—the quantity may be set down at 10 double-horse cart loads, to which should be added 1 bushel of Plaster and two of ground bones, the whole to be well mixed together, and suffered to lie in pile two or three weeks before being used. If the bones were moistened with 10 pounds of sulphuric acid diluted with 100 pounds of water, and permitted to digest a few days before being put into the compost, their effects would be more prompt, as they would then immediately give out their nitrogen as well as phosphoric acid.

DESTRUCTION OF SASSAFRAS—APPLICATION OF BONE MANURE.

To the Editor of the American Farmer.

I have noticed latterly a disposition on the part of your subscribers to fly to you in their difficulties, and under the hope that you or some of your numerous readers may relieve me from mine, is the object of my present communication.

I have a field of about 15 acres, divided into two parts, on one half I have applied 60 bushels of lime and 8 bushels of bone, on the other 80 bushels of lime, 12 bushels of bone, and 200 lbs. of Guano per acre, and to each acre a peck of clover seed. The first year there was a good yield of grass, the second the clover gave place to innumerable small sassafras, that have in many parts of the field taken complete possession and rendered it at present valueless. The ground previous to the above application, was very poor, but no appearance of sassafras. What rotation of crops will be most effectual towards their extirpation?

I notice that many who recommend the use of Bone, (yourself among the number) advise that it should be mixed with earth, and be allowed to ferment before sowing; as this is not the common practice here, I would ask whether it is not as effective sowed out of the bag and harrowed in immediately?

I have seen some experiments detailed, that have been lately made with nitrate and sulphate of soda.

In 1843, I used a mixture of 1-3 nitrate to 2-3 sulphate on a variety of crops, following strictly the directions laid down in Johnson's Agricultural Chemistry, without experiencing a shadow of benefit, and in some case a positive injury. I mention this to my brother farmers as a caution to touch lightly.

I am now experimenting with salt, on my wheat,

at the rate of 4 bushels per acre, and you may possibly bear the result from a

MONTGOMERY FARMER.

In reply to the inquiries of our Correspondent, "*Montgomery Farmer*," we would remark:

1st. The best method we know of to destroy Sassafras Bushes, is to cut them down in the spring, and pasture the lot or field infested with them with sheep and cattle. These animals are very fond of the young sprouts, and eat them as fast as formed, so that the bushes are kept in a continual state of bleeding, which so exhausts their principles of vitality as to ultimately kill them. A field thus treated, for two or three years, will be rid of the pest, and may be again ploughed and restored to culture, with the advantage of being improved in fertility, by the droppings of the stock while depasturing thereon. As an auxiliary means of fertilization, we would, each spring, early, apply a bushel of plaster, per acre. By this means the ammonia would be fixed, and washed into the soil.

2d. *Bone manure*, sown out of a bag, without any admixture with other substance, would be as effective, *ultimately*, as though it had been mixed. It would probably last longer. The object gained by mixing and fermentation, is, to resolve the cartilagenous parts of the bones, and bring them into more *immediate* action. The object gained by dissolving bones in sulphuric acid, is similar, though acting in a two-fold way—it not only dissolves the membraneous portions of the bones, but the mineral parts, also, and prepares the phosphates so as to become immediately the food of plants; thereby anticipating the slower action consequent upon the decomposing processes of heat and moisture to be found in the earth.

3rd. The *Nitrates*, which our friend speaks of, are, in our opinion, better adapted to grasses than grain.

The *experiments* which our correspondent is making with *salt* on *Wheat*, will doubtless prove interesting, and thanking him for his present communication, in advance, we bespeak from him a paper upon the efficiency, or inefficiency, which ever it may turn out to be, of his application of Salt to wheat.

To our readers. If any should know a *better* plan of destroying Sassafras bushes than we have pointed out, we should thank him to favor us with a paper upon the subject, in order that our correspondent may avail himself of it.

The cultivation of rice has been attempted on the salt lands near the mouth of the Rhone, and has met with perfect success. This cultivation, whilst yielding great produce, has the additional advantage of entirely freeing the land of the salt. This land is alluvial soil of the first quality, and is now made excellent for all kinds of production. This year three hundred hectares (a measure equal to two acres seventy-five square poles) have been turned to rice fields, and this example will be promptly followed. Thus, in the space of a few months, thanks to this fortunate attempt, the agriculture of France will have been enriched by a new product, and the lands of the Delta of the Rhone will have increased ten times their value.—*French Paper.*

For the American Farmer.

PHILADELPHIA CO. AGRICULTURAL FAIR.

Mr. Editor,—On the last day of September and 1st of October, I had the pleasure of attending the Philadelphia Agricultural Society's meeting held at the Rising Sun, three miles from the city. There was a large assemblage of people, and everything passed off most happily—As a lover of agriculture and all that is connected with the pursuit, I was much delighted with all I saw and heard.

The show of cattle was very fine—specimens of the lordly Durham from the superb herds of Messrs Gowen, Kelly, Smith, Garret and others—many of the mixed breeds were also there, showing careful breeding, and high excellence as dairy cows—one cow with *two* calves, altho' one calf looked half a month older than the other—Mr. Physic had some remarkable Alderney cows—Judge Longstreet, some very fine *native Devonshire cattle*. The fine stock, and the taste displayed by Mr. George Blight, in decorating the public stand, commanded deservedly the admiration of every person. The Leicester Sheep were fine, and the South-Downs exhibited by A. Clement, esq., were the finest I ever saw, and cannot be surpassed in the Union.

The show of Hogs was very fair, being good specimens of the pure Chester county and a cross of that breed and the Berkshire.

There was a noble display of Agricultural machinery.

POULTRY.—Some of the largest and finest ever seen—white Turkies—white top knot Ducks—ditto chickens. West India and East India chickens—Buck's county, &c. &c.

Horses.—Twelve or more superb stallions, and fine brood mares for the road and for slow-draft. One mare was exhibited which it was stated had walked a mile in 7 minutes, trotted it in 2 m. 54 sec. and then hauled a ton of coal 1 mile in 12 minutes. The show of young horses was nothing extra.

Butter.—This article was capital, but the richest, finest flavored and of the most beautiful color, that ever your humble servant had the pleasure to eat was that which Mr. Physic offered, as made from the Alderey cows, and which of course received the premium—Mr. Ford offered some which was packed in June, and was so fine that at most cattle shows, certainly in Maryland, would have taken a premium as butter just fresh made, it was so nice, so fine, so fresh, and so sweet.

The association had a splendid dinner each day, at which every gentleman stranger from abroad was waited upon and invited to join them, and the best seats were reserved at table for their invited guests. The table groaned with every luxury of the season, wine flowed, champaigne corks popped, wit like the wine sparkled, fun was plenty, mirth and cheerfulness presided at the elegant repast, while toasts were given and with becoming cheers, and other tokens of applause were received by the large crowd. Among the toasts was one by the acting President, Mr. A. Roberts, (who presided with urbanity and great dignity,) in which he complimented Maryland. This was responded to by a Marylander in a short speech and toast; and in a toast by Col. C. of Md. which was received with applause.

When I went to Pennsylvania, my mind was imbued with all those foolish prejudices that Southerners have against the North—I expected to meet every other man a rank Abolitionist—to see a hard-fisted, plain, straight-coated set of grave Quakers with white hats and broad-rims, cold as adamant, and distant,

unsocial, and *so sober*, that as Boz said, "it would make a man's hat raise on his hair, which would stand up like porcupine quills, while his very coat collar stiffened"—But in a moment the disagreeable illusion vanished, and I found myself surrounded by the most sociable, hospitable people I ever visited—Thier urbanity, gentility, intelligence and elegant deportment, showed them to be "high-bred" peers of the sons of the sunny South: their frankness and generous courtesy is unsurpassed by the old fashioned and agreeable welcome that meets a stranger in old Virginia or in the land of the Palmetto; while their fondness for fun, and the social pleasures when knee touches knee under the mahogany, too forcibly reminded me of the sport of our jolly fellows at a *Prince George's County Agricultural Dinner.* We Marylanders were charmed—and we returned home with new ideas, with increased zeal in the common cause, and with lively recollections of the pleasure that we received from the acquaintance we formed with many of the noble sons of that great state.

Col. Capron purchased at a high figure a beautiful lot of South Down Ewes and the Ram which took the premium at Utica, last year, from Mr. Clement—he purchased also at a very high price four splendid Durham Cows from Mr. Kelly, and almost every premium Durham Cow and Heifer from Mr. Gowen and Col. Smith; among those from Mr. Gowen, were "Miss Model," who took 1st premium, and his famed cow "Cleopatra," who brought a few years ago $350—in all about fourteen splendid Durham cattle. C. B. Calvert, Esq. also purchased an Alderney, and a premium snow white Heifer of Col. Smith, and other Durhams. Your correspondent obtained some fine Leicesters, among them was the great buck "*Lambert*," whose portrait you published in the November No. of your paper, 1845.—Our party brought along some splendid chickens from Mr. Newbold and Mr. Smith and other gentlemen, who showed their kindness in this truly *substantial* manner—*like the Frenchman*—you know the story of the Frenchman's *charity*.

All this is a strong evidence of the great utility of Agricultural Exhibitions; it brings people far remote into close communion—it dissolves prejudices and unfounded conceits—it strengthens the bond of good fellowship—it spreads knowledge—it disseminates useful information—establishes practical facts, and increases the industry and zeal of the agriculturist—and it promotes the spread of various vegetable productions, at the same time tends greatly to stimulate individuals to purchase fine stock, and thereby add to the wealth and prosperity of their respective neighborhoods. See to what an extent this one trip of a few individuals may lead, by their introduction, into this county, of some of the finest specimens of Durham Cattle, Alderney cattle, South Down and Leicester sheep, that are to be found in the Union. Placing directly under the eyes and as it were at the doors of the Planters of this region, this fine stock, that they may see for themselves, and *seeing*, may procure for themselves, some of the produce, that their cattle and sheep may, in like manner, be increased in every quality which renders stock worth possessing.

PAUTUXENT PLANTER.

From the Philadelphia Enquirer, Oct. 1.

PHILADELPHIA SOCIETY FOR PROMOTING AGRICULTURE.

The Rising Sun Village, on the Germantown Road, presented a scene of unusual animation, interest and gaiety yesterday, in consequence of the Great Annu-

al Meeting of the "Philadelphia Society for Promoting Agriculture," having assembled there to celebrate the Annual Exhibition. The inn-yards, roads and even fields of the village were thronged with vehicles, to say little of hundreds of equestrians and pedestrians, or of the lowing cattle that were driven to the annual Show. All who arrived on the ground were soon attracted to the cattle sheds, where many remarkably fine specimens of stock awaited examination.—Among these we observed at least twenty head from the farm of James Gowen, Esq. of Mount Airy. The pure-blooded Durhams sent by this gentleman were well worthy of commendation—particularly the celebrated Durham bull "Bruce." Most of Mr. G.'s specimens were imported or derived from imported Durham stock; but some of them having taken first premiums at the last Exhibition, were on account of that advantage, excluded from premiums at the present.

[Here follows a long list of the different Cattle, &c. exhibited. Its publication here would be uninteresting; suffice it to say that almost every species of animals were represented, from the lordly Durham down to the sucking pig.]

Every department of the Exhibition appeared to be well arranged, for which our agricultural friends are much indebted to the committee of arrangements, A. S. Roberts, Col. R. Smith, Isaac W. Roberts, Geo. Blight, Henry Chorly, Asher Moore, Aaron Clement, David Landreth, C. S. Smith.

The dinner committee consisted of Aaron Clement, C. S. Smith, Geo. Blight.

At half past 2 o'clock, about eighty gentlemen sat down to a sumptuous repast, prepared in a long building in the garden of the Old Rising Sun Inn, by Mr. James Hamill, proprietor of that establishment. The viands and cookery were of the highest order, while the iced wines would have reflected credit on the first hotels in our city.

Algernon S. Roberts, Esq., one of the Vice-Presidents of the Association presided with dignity and urbanity, and was ably sustained by James Gowen, Esq., in the Vice Chair. Among the gentlemen whom we understood to be visiters, we observed Colonel Bowie and Capron, Dr. Thomas and Mr. Woodward, all of Maryland; W. Peter, Esq., H. B. M. Consul in Philadelphia; T. P. Gaskill, Esq., Samuel C. Fisher, Esq., of Olney; and W. S. Torr, Esq.

Shortly after dinner, Mr. W. S. Torr rose and referred with much feeling to the exertions of the late Nicholas Biddle, Esq. in the cause of agriculture—a man whose superior in mind and heart he had never met with. He proposed—"The memory of the late President of our Society, Nicholas Biddle, Esq."

Drank standing.

The chairman, A. S. Roberts, Esq., after prefacing his toast with appropriate and able remarks, proposed—"The memory of our late President, Dr. Mease, the friend, the untiring friend of Agriculture." Drank standing.

Mr. W. J. Leiper, gave "Agriculture, Commerce and Manufactures."

By Mr. Gowen, V. P., "The President and constituted authorities of the United States."

By Mr. Ford, of Onley, "The Press of Philadelphia City and County," and Mr. Freas, of Germantown, was called on to reply.

By Mr. Gowen—"The Governor and Commonwealth of Pennsylvania."

By the President, Mr. Roberts—"Our sister States, Delaware and Maryland.—May our rivalry always be the competition of friends!"

This toast having been enthusiastically responded to, Mr Roberts said that Maryland, at least, was largely and ably represented on the present occasion.

Colonel Walter W. W. Bowie, of Maryland, then rose, and acknowledged the honor conferred upon Maryland, in a pointed and pithy speech. During his remarks, he said that he had been bred to the bar, but unfortunately for him, he had not learned to speak, unless he was paid for it and had gotten his steam up.—On this occasion, the first condition was out of the question—and as for getting his steam up, though not by wine—it was up by enthusiasm in the cause of agriculture. There were more competent Marylanders than himself in the room, but then they had not so much brass—and so he had been requested by them to come forward. Col. B. spoke of the manner in which the agricultural interests of the United States had been too much neglected by all parties—but he hoped to see the day, when there would be a Convention of Agriculturists from all parts of the Union.

The long array of faces before him exhibited a union of the agriculturists; while the long array of bottles showed that they had spirits on board. Col. B. spoke highly of the hospitality and kindness he had met with in Philadelphia, and alluded to the saying of Napoleon, that agriculture was the sole wealth of every nation. Marylanders would ever be ready to take Pennsylvanians by the hand, either on the battle-field or in the fields of agriculture. Col. B. gave as a toast—"PENNSYLVANIA must ever remain the Key-stone in the great Arch of the American States, while her Merchants, her Farmers and her Mechanics continue unsurpassed in their industry, honesty, skill and wisdom."

Mr. Gowen, V. P., in an able and appropriate Address, mentioned in terms of gratification on the part of the Society, the pleasure its members had derived from the presence of a number of distinguished visiters. The Society did not labor for the advancement of the individual members alone, but for the general good, as its title clearly signified. Therefore, not only tillers of the soil were enrolled among its members, but gentlemen, lawyers, and professional men of all kinds—and yet, with all this support, he (Mr. G.) was sorry to observe that there were so few members who, properly speaking, were practically tillers of the soil. It could not but be gratifying that there should be assembled to honor their Anniversary, friends and visiters from several sections of the Union, particularly from Maryland and Delaware. Many whom they had formerly met, had gone to their long account—but their mantle had fallen upon others; and to none was American Agriculture more indebted than to Mr Calvert, of Maryland, an example to his compeers—for on his farm he was a farmer, in his halls a gentleman, and in his mill, a miller.

Mr. G. then referred to a distinguished gentleman on his right, Mr. Peter, Her Britannic Majesty's Consul—who was not narrowed down in his views by any sectional predjudices—but whose enlightened mind had explored the channels of industrial pursuits, not only in England but on the European continent: and that gentleman, as at this day, had never failed to cheer the association on, for he was a devotee at the shrine of Agriculture. Mr. G. proposed "the health of our distinguished guest, W. Peter, Esq."

This health having been warmly responded to, Mr. Peter rose and thanked the association, not only for the handsome manner in which he had been named by the Vice President, but also for the kindness with which the toast had been received by the members of the association. He thanked them from the bottom of his heart. He had derived great pleasure from the Exhibition, which, although not as large in some of its departments, as in previous years, yet he was bound to say that many animals deserved and would gain prizes, not only in the new World but in the Old. Mr. P. referred to the changes in the English Corn Laws, in virtue of which, the importation of grain had become comparatively free.

The large population of England and her limited acres, under these circumstances, would produce a great demand—especially for Indian corn, and thus she would be a greater customer than ever to the United States. It had been said that the Baltic and Black Sea would produce cheaper wheat than America. He (Mr. P.) did not believe it—for the grain was not so good in quality, neither was there so much land in cultivation in those regions as had been represented.

He rejoiced in the effect of the cheap corn duties of England, inasmuch as they tended to draw closer the bonds of friendship between England and this country, a friendship which, as Christians, as enlightened nations, speaking the same language, and of the same blood, both countries ought to cherish.

There ought to be no rivalry between them save one—and that was the honorable rivalry of which shall farm, and which shall manufacture better than the other! Mr. P. proposed "Friendship and Peace between England and America."

Imported Stock.

THE following description, &c. of the stock recently imported by the Massachusetts Society for promoting Agriculture, is written by E. Phinney, one of the active officers of that Society, and is copied from the *Farmers' Library*.

THE trustees, with an honest desire of promoting the interests of agriculture and improvement in the various branches of rural economy, had, for many years, devoted the income of the Society's fund to premiums on the best cultivated farms, on the various kinds of farm produce, farm stock, and to such other objects as they believed best calculated to promote the interest of the great body of farmers Of the effect of their labours, the public can the best judge.

It seemed to the trustees that very little progress had been made, particularly in the dairy stock of the country. They could point to no particular object, no decided mark of improvement or permanent change, upon which the future and progressive improvement of our dairy stock could, with any certainty, be calculated.

Thousands of dollars have been offered and awarded in premiums for the best milch cows within the commonwealth, during the last twenty years, and, as appeared to the trustees, *to very little benefit.* Whoever has attended our cattle shows will have occasionally met with a cow remarkable for her milking properties, which the fortunate owner purchased from some drove. This *accidental* cow is exhibited at the cattle show; well authenticated proofs of her great yield of milk or butter are produced; the owner takes the highest prize, and puts the money into his pocket; the calf is sold to the butcher; and the cow the next year is put into the beef barrel. And this has been the beginning and the end of most of the native cows to which the highest prizes have

been awarded. The writer knows not a single instance where the offspring of any one of these high-premium native cows has inherited the valuable properties of the dam in a sufficient degree to induce the owner to raise it, with the exception, perhaps, of the famous Groton cow, whose descendants, in the hands of Colonel Jaques, might have added greatly to the value of our dairy stock, had the Colonel possessed the means of carrying out his plans; and, in this instance, the valuable properties of the dam were transmitted to the progeny solely by the means of crossing with the pure breed of a foreign stock. The cautious farmer will not run the risk, nor incur the expense, of raising a calf from stock, of the origin of which, and of the blood of the various breeds that runs in the veins of his favourite cow, he knows nothing. Acting from a belief in the truth of the old adage, which has been taught him from his youth upward, that "a good cow *may* have a bad calf," he can have no assurance that the descendant of his native cow will not take its character from, and inherit the inferior properties of, some near or more remote ancestor. He had rather take his chance in the next drove that comes along, knowing that he shall at least avoid the expense and trouble of rearing a calf upon whose good properties he can make no certain calculation. Now it will hardly be pretended that the offering and awarding of premiums for this description of cows has, or ever will have, the effect to improve the dairy stock of the country.

The writer would by no means detract from the value of these accidentally good cows, the natives of the country. There are, no doubt, to be found among the farmers of Massachusetts, many cows of native origin, possessing as valuable properties for all purposes, except for breeding, as any that can be imported from abroad. And they are not without their value as breeders, where they and their descendants may be crossed with the pure blood of some long and well established race of foreign animals. In this way we may chance to perpetuate the rare qualities of our native cows, united with the well established traits of character of the imported stock.

It may be contended that we need not the aid of foreign stock to raise up one of the best breeds of cattle in the world. This may be true; but who will undertake it? What individual farmer has the patience, the skill, the intelligence, and the capital, to engage in a task that will require many years and much capital to bring to any considerable degree of perfection? And where would be the propriety or the economy of undertaking a work of this kind, when, by a little extra expense at the commencement, we may find the work already done to our hands?

Many farmers in this part of the country, though depending principally for their income upon their milch cows, are not aware, it is apprehended, of the small produce derived from them; and would, no doubt, be surprised on learning that their cows generally do not yield an average daily produce of more than two to four quarts of milk for the year.

The average price of milk for the year, when drawn from the cow, will not exceed three cents per quart, either for the purposes of manufacturing into butter or cheese, or to sell in the market. Let the farmer set off the expense of keeping against his six or twelve cents a day income from his several cows, and he will see but a small chance of acquiring wealth from the income of his dairy. But let him have a stock that, with the same keeping, will yield a daily average produce of six or eight quarts of milk, and he will find the produce of his dairy, which before gave him hardly enough to pay for the feed of his cows, now affording him a net profit, which will more than meet the extra expense which he may incur in the purchase of his improved breed of cows.

It may be said that the expense of keeping the improved breed will be greater than that of the native cows. This may or may not be the case. But the question with the farmer should not be, which will require the most food? but rather, which will give the greatest net profit on what they consume? It is the greatest capacity which the animal possesses of converting her food to milk, which ought, in the estimation of the judicious farmer, to constitute her relative value.

It was with a view of introducing among our farmers a dairy stock that should, with proper care and management, remunerate, the expense of keeping, that the trustees were induced to appropriate so considerable a sum to this object.

What they have now done forms but a nucleus or starting point, from which, with the aid and countenance of a liberal public, they hope in due time to diffuse among the farmers of Massachusetts, not only an improved race of animals, but also an ambition to excel in everything that relates to this important branch of rural economy.

The breeds of cattle which the trustees believed, under all the circumstances, to be best adapted to this country, best calculated to promote the object they had in view, and to subserve the wishes and wants of the farmer, were the Ayrshire and North Devon.

The Ayrshire cows have been, for nearly or quite a century, distinguished as deep milkers, and at the same time are known to be a hardy, mild-tempered, and docile race, easily kept, with a disposition to fatten when not in milk, and having a capacity of converting their food to milk beyond that possessed by any other breed of cows in Great Britain.

The venerable Aiton, who may be justly styled the pioneer and champion of improved husbandry in Scotland, and particularly of that branch which relates to dairy stock, says: "The Ayrshires are the most improved breed of cattle to be found in the island, not only for the dairy, in which they have no parallel, under similar circumstances, but also in feeding for the shambles. They are, in fact, a breed of cows that have, by judicious selection, cross coupling, feeding and treatment, for a long series of years, been brought to a state of perfection which fits them, above all others yet known, to answer in almost every diversity of situation where grain and grass can be raised to feed them, for the purposes of the dairy, or for fattening them for beef."

In the dairy establishment of Mr. Harley, at Glasgow, consisting of 150 cows, they were principally of the Ayrshire breed, to which he gave a decided preference over any other breed. The average quantity of milk given by the cows in his establishment for the year, was eleven quarts per day from each.

In the famous dairy establishment kept by Mr. Rhodes, near London, of 400 to 600 cows, "he has tried the Ayrshires, to the number of 150 at a time, and by him they were highly approved—affording a large quantity of rich milk—fattening in a very short time, when they left off giving milk—and producing beef which was more highly valued, and sold for a greater price in the market than that of the Short Horns."

Aiton asserts that many of the Ayrshire cows, in their best condition, and well fed, will yield at the rate of 1000 gallons of milk in a year, or over ten quarts per day. Rankin, however, states his opinion that Aiton had given the daily average produce too high, and thinks that few herds of twenty cows or over will average more than eight hundred and fifty gallons, or about nine quarts per day. He also states that he had seen thirty-six quarts of milk drawn from a cow in one day, and that he had a three-year old quay that once for six weeks after calving gave twenty-eight quarts per day. The dairymaid predicted that "there had been o'er-muckle talk about her for ony luck to come of her," and he states that she soon afterward received an injury which caused one of her quarters to become dry of milk.

The characteristic points of the Ayrshire cow, when Aiton wrote, were: "Head small, but rather long and tapering at the muzzle; the eye small, but smart and lively; horns small, clear and crooked, and the roots at considerable distance from each other; neck long and slender, tapering toward the head, and no loose skin below; shoulders thin; fore quarters light; hind-quarters large; back straight; broad behind; joints rather loose and open; carcass deep, and pelvis capacious and wide over the hips, with round, fleshy buttocks; tail long and small; udder capacious, broad and square, stretching forward, and neither fleshy, low hung, nor coarse; the milk veins large and prominent, teats short, and all pointing outward; skin thin and loose; hair soft and woolly."

This is an accurate description of the Ayrshire stock imported some seven or eight years ago by the State Agricultural Society. The improved Ayrshire stock of the present day, which are descended from the famous *Swinley* stock, and of which the recent importation by the Society consists, differ in some respects from those above described by Aiton. The head is shorter, wider between the eyes and horns, thinner in the fore-quarter; the shoulders finer and more closely set; the limbs and body shorter, and the joints more closely and firmly set; the abdomen deeper and more capacious; the udder broader, the milk veins more prominent, and the teats hanging directly down; hair longer, though more silky, and finer in the handling; and are altogether a hardier race of animals than the Ayrshires of former days.

"The colour," says Robertson, "is generally a brown of many hues, from dark to yellow, intermixed and mottled in many a varied form and proportion with white; almost none are of one colour. In a herd of forty or fifty, there will no two of them be alike in colour—in this respect exhibiting a diversity not unlike a bed of tulips, and of as many hues and shades, in an endless variety of beauty."

The North Devon stock has long been celebrated as a breed of cattle beautiful in the highest degree. For the dairy, they cannot be considered equal to the Ayrshires; but, viewing them as uniting the three qualities of working, fattening, and milking, they may be considered as unrivalled. Some of the writers upon English stock give them a high rank as milkers, and Mr. Conyers, of Capt Hill, near Epping, a district almost exclusively devoted to the purposes of the dairy, preferred the North Devons, "on account of their large produce, whether in milk, butter, or by suckling."

"The North Devon oxen," says an English writer, "are unrivalled at the plough. They have a quickness of motion which no other breed can equal, and which very few horses exceed. They have also a docility and goodness of temper, and also a stoutness and honesty at work, to which many teams of horses cannot pretend."

Such is the character given of the breeds of cattle—a bull and four cows of each—which the Society have imported with a view of improving the stock of the country; and in order that there should be no mistake or disappointment as to the character of the respective breeds for purity of blood, and with a view of obtaining the best animals upon the most reasonable terms, the trustees decided on sending out an agent for the purpose of making the selection. And accordingly, Mr. Alexander Bickett, of Lowell, a gentleman of intelligence, and an excellent judge of cattle, who had resided for some years in Scotland, and personally known and highly respected by most of the owners of distinguished herds of cows in and about Ayrshire, was engaged in July last to proceed to England and make the purchase. Mr. Bickett had, within a few years past, attended some of the cattle shows in Scotland—had noticed the best stock, and knew where he could place his hand upon the best cattle in the country. The acquaintance of Mr. Bickett with the respective owners enabled him to treat with them upon terms much more favourable to the Society than could have been done by a stranger. The four Ayrshire cows and the Ayrshire bull selected by him, are probably equal, if not superior, to any other five cattle that could be purchased in Scotland. They are all descended from the purest and best blood of the Ayrshire stock.

In the selection of the North Devon stock, Mr. Bickett applied directly to the Earl of Leicester, from whose beautiful herd of North Devon cows he hoped to be allowed to make the purchase. When it was made known to the young Earl that the stock was wanted for the Massachusetts Society for Promoting Agriculture, he generously and very readily fell in with the views of Mr. Bickett; and, possessing all the kind feelings of his father, the late venerable Earl of Leicester, toward the people of this country, he allowed Mr. B. to select from his flock, at a very moderate price, a cow and three beautiful heifers, all in calf by one of the most celebrated North Devon bulls in the country. The Earl having no bull that he could part with, he recommended a young bull of Mr. Blomfield, which Mr. Bickett succeeded, after much importunity, in purchasing.

The cattle were all shipped at Liverpool, about the first of September last, and arrived in Boston about the first of October. They were attended on the voyage by Mr. Bickett, and with so much care and fidelity on his part that no injury happened to them, and they were in as fine condition when landed in Boston as when put on board the ship at Liverpool. The North Devon cow calved on the passage from Europe, and the three North Devon heifers have calved since their arrival—the four calves furnishing a fine specimen of this beautiful stock.

The appearance of the cattle on their arrival in Boston was very gratifying to the trustees and all who saw them, and such as was highly creditable to the skill of Mr. Bickett, and to his indefatigable care and attention to them while on shipboard.

The cattle on their arrival were placed under the care of the subscriber, at his farm in Lexington, where the public are respectfully invited to call and view them.

LEICESTER SHEEP.—Our attention was drawn yesterday to a fine lot of eight Leicester Sheep, of the most improved stock, just imported in this city for

the Hon. Henry Clay, of Kentucky. These sheep are on board of the ship Franconia, at the foot of Race street. We have also in our power to give the following extract from the letter of an esteemed friend and neighbor of Mr. Clay's, which will give some idea of the value of this particular importation:—"The deep interest felt by all the wool growers in this section of country, (Fayette County, Kentucky,) for their safe arrival, independently of an original cost of twenty guineas per head, must plead as my apology for the earnest request of your attention to their safe transmission after their arrival at Philadelphia."

If the fact that these animals are imported jointly with Mr. Clay by his neighbors, could be made known to those interested in the promotion of agricultural pursuits at the various points upon the route through which they will be passed, it might, perhaps, facilitate their safe progress to their ultimate destination.

The animals are in splendid order and condition, and shew that their keep on shipboard has not been neglected. To the farmer we tell the fact, that for the forty-two days for which they have been at sea, they have steadily eaten their allowance of food, even when exposed to the roughest weather, thus giving proofs of their hardiness.—*Phil. U. S. Gaz.*

REMEDIES FOR SEVERAL DISEASES IN CATTLE.

Murrain.—Two ounces corriander seed, bruised; half pound common salts; one ounce gentian powder. The whole to be mixed and administered in water.

Garget, sometimes denominated "milk fever," may be effectually cured in a few days by administering half an once *nitre* every other morning. The following recipe has been handed us by a friend, who speaks confidently of its efficacy in every stage of the disease. Brimstone, two ounces; diapente, one ounce; nitre, pulverized, one ounce; ground cummin-seed, powdered, one ounce. This is to be administered daily in a little gruel, and the udder rubbed daily with goose oil

Diarrhœa.—Powdered catechu, half ounce; opium, ten grains: mixed in a little gruel.

Fever.—Let blood, and if the bowels are constipated, administer half pound epsom salts in two quarts of water gruel.

Embrocation for Strains.—Spirits of hartshorne, four ounces; sweet oil, eight ounces; oil of thyme, half ounce.

Yellows.—Diapente, two ounces; cummin-seed, finely pulverized, two ounces; fenegreek, powdered, two ounces. These ingredients should be thoroughly boiled in a close pipkin, or kettle, for the space of fifteen minutes, and administered daily in a little lukewarm gruel.

Bolts—Worms.—Epsom salts, half pound; corriander seed, bruised, two ounces; in a quart of water.

Purges in cases of Vegetable Poisoning.—A very safe and effectual purge is found in epsom salts, the dose being from half pound to twelve ounces, given in water gruel. In many cases of poisoning from the ground and water-hemlock, laurel, and the yew, linseed oil has proved a valuable purge; the quantity administered being from a pint to a pint and a half, according to the constitution of the patient.

Spavin.—Copperas and vinegar, equal parts, make an embrocation, and rub the affected part, keeping the animal dry and stirring him smartly, till you effect a cure. Another excellent medicine for the troublesome, and, as many suppose incurable ailment is made by casting a quantity of rusty iron into a pot full of urine. The vessel containing these should stand for three or four days in a warm situation and be frequently agitated or stirred. The liquid should be applied twice a day, morning and evening, with a sponge and well rubbed in. Great relief, if not a radical cure, will result from this application.

I send you, Mr. Editor, the foregoing for insertion in the *Telegraph*. Should it prove serviceable to only one of my agricultural friends, I shall be repaid fully the labor of preparing it for your columns.

Bensalem, Bucks county, Oct. 3, 1846. I.

[*Germantown Telegraph.*

Ohio Tobacco.—We noticed in our last the sale by Mr. Wm. Lamping, of 2 hhds. Ohio Wrappers, shippers, at $32 and $27.50 per 100 lbs. And we now refer to the circumstance again, says Lyford's Baltimore Commercial Journal, simply for the purpose of suggesting to whom it may concern, the policy of modifying the Tobacco-planting and selling system—if they wish that the state in which it is grown, or the market to which it is forwarded not subsequently sold and shipped, should not lose the fair reputation—to withhold the cutting of the inferior sorts under all circumstances, and rather leave them to undergo decomposition, and thus prepare a compost to enrich the soil for a more desirable growth—or *if* cut, not to send the article to a market when its proceeds will not only *not* pay the expense of transportation, but operate to the material injury (by lessening the prices) of good Tobacco.—And dealers abroad ought, also, to exert their influence to effect such a reform.

The question with planters in this age, and under circumstances as they now exist in the commercial world, ought to be—whether it would not be more their interest, present and prospective, to cultivate a small crop, and attend to it properly, in assorting and conditioning it for market, and get a high price for it as did Mr. Hance, of Ohio, the owner of the hogheads referred to above—for the cost is a great deal less to prepare, pack, and send one hogshead of the value of $30 per 100 lbs., than it does twenty hogheads of only $1.50—at which latter many sales have been made the present season—or, to make large crops of all sorts, but mostly inferior, and send all to market—thereby overstocking and rendering unsaleable the whole; but at all events protracting the time of sale, and then applying a good portion of the proceeds of the good to paying the expenses of the inferior, those of the latter not being adequate thereto. In a word, would it not greatly more redound to the character of Ohio to be celebrated for a little of a good than for a large quantity of a bad article? Jefferson County, in Kentucky, will answer this question in the affirmative, as it has done for many years past.

Gray's Endless Rack Horse Power.—This is one of the great inventions of the day.—Mr. George W. Ginn has had it in use lately, and it was found that with *only one horse* attached to the Thrashing Machine, he was able to thrash out from 100 to 125 bushels of wheat per day. Let the farmers think of this great saving of labor, and supply themselves at once.

The Rack has also been used at the Railroad Depot, in sawing wood, and is found to be of great value for that service. It be atsany thing yet presented to public attention.—*Winchester Repub.*

VIRGINIA LANDS.

For the American Farmer.

Mr. EDITOR,—I herewith give you some extracts from a letter I received from a friend of mine who is now living in Surry Co. Virginia: you are aware that much is said and a great deal written and published about the advantages of going to Virginia, to buy land, and farm—feeling an interest in giving the experience of others well calculated to judge, for the benefit of your readers, I have copied part of the letter in order that some might be benefitted—the writer is a gentleman somewhat advanced in life, raised a Farmer, and always followed it; he had a good training, and good land to operate on in a part of Chester County Pa., that will compare with any other land in the State, at least in any other part of Chester Co.; added to this, he is an agricultural statistic; a plain blunt man, who writes what he thinks and sees, without fear of being called in question by any. I had written to him and stated several points that I wished information on; his letter takes these up separately and answers them very satisfactorily. "Sep. 1, 1846. Never in my recollection have I enjoyed good uninterrupted health so long, as since I came here, and all the family have been well except M. who has had something of her old complaint (I believe Erisipelas.) I see nothing here indicative of sickness; if people any where would live as many do here, they would be sickly; out late at night, hunting and going home drunk and reckless of every means to preserve health; if not so, why the undue proportion of sickness and death among the males, which is about 4 to 1; in most countries they are about equal. I do believe, all things considered, there cannot be a better place to live, a more delightful climate; I have felt far warmer weather in Pa. than here; and my Philadelphia newspaper says it has been warmer at New York than here. We have as kind neighbours as ever honored a neighborhood; some of them have endeared themselves to us, beyond what you could imagine. I speak advisedly when I say, a man can fix himself here better for $1000, than he can for $10,000 in Pennsylvania; two gentlemen, one from near Lancaster and one from Franklin County, were here, to see the place, through a letter I wrote to the Rev. M. B. —they all like the place very much, and wonder why I should be the first discoverer; one of them was looking at a place of 600 acres, price $4000; he told me while looking at the land, that he could sell his place of 120 acres before he got home for $131 per acre, $15,720, and he was sure if he was a young man, in 7 years he could make the place here as good as his own; only look at that! he is a man of intelligence, and owns one of the best farms in Lancaster County, and was attracted here by M. B. reading to him a paragraph of my letter; why sir, there are inexhaustible Marl beds here, that on analization contain 97 per cent. pure lime. Pequa Lime, Chester Co. Pa. contains 20 per cent. magnesia, a very deleterious article in Agriculture. I have seen the western part of Pa. and Va. and the eastern part of Ohio, and have read and heard much of other parts, and am free to say, there is none equal to this. One Pennsylvanian has already bought 1300 acres here for $2600, and is to move here in October; he is now on his way, and stopping in your city at present; I have built myself a small house, cleared some of the land near it, and planted some corn, oats, vines, &c.; much of it had a stump, or perhaps two to every square yard, and it was almost impossible to scratch up the soil; the corn is far beyond any thing I could expect, beans and field peas excellent, pumpkins not good, potatoes tolerable, oats poor; you can hire a man, horse and cart to hau for about 30 cents a day. Hay, there is none in the County, blades sell for 75 cts. per hundred. In fact there is no place in the United States where God has done so much and man so little. Slavery or something has paralized every nerve, and the choicest blessings are overlooked and unappreciated; some have marl laying on the top of the ground, (which is about equal to a heap of dung and one of lime, inexhaustable in their nature,) and will not use it, because those who do use it, make use of a great deal of dung; and say they, if marl is what it is said to be, why do they use dung.

"There are some great bargains in land offered here, such as would astonish the most sceptical; the people here are aware of their deficiency in farming, and are anxious for northern men to settle among them; continual applications are made to me to sell land for them; there is an apple Still in blast now on about every other farm, most of them are without shelters; they set up attending to them all night; they are 50 years behind the age, in proof of this they count their money in shillings and pence, think there is no hospitality without spirits, big hill their corn, as was done when I was a boy; they are ignorant of any of the late facilities of bettering the condition of mankind; as their fathers did, so do they."

BUCKS CO. (PA.) AGRICULTURAL SOCIETY.

The annual exhibition of this society was held on the 15th ult. and from the description given of it in the Newtown Journal, it was a very spirited affair and highly creditable to the members. The number of persons present is estimated at from 3 to 5000, a number unprecedented in the history of the Society —The display of Horses, Cattle, Swine, and Poultry, was quite extensive.

Edward M. Paxson, Esq. was the Orator of the Day, and delivered a very neat and appropriate discourse, from which we make a few extracts; and we are glad to find that the subject of the introduction of the Sciences connected with agriculture, into our schools and colleges, is gaining favour in the various selections of our country, among enlightened agriculturists.

Extract from Mr. Paxson's Address.

"As I said before, the object of our Association is to increase the profit and the pleasure of rural labor —it is to advance the interests of the husbandman, and through him, the prosperity of the whole country. How is this to be accomplished? What means, think you, will prove most effective? Among other plans which I shall particularly commend to your attention, is *a school to illustrate the principles of science, upon which the labors of Agriculture are based, and to teach the best models of practice.*

It would seem hardly necessary at the present day, to urge the necessity of a due appreciation of Agricultural Science. Within the last few years, rapid advances have been made in this matter; yet still, in proportion to its extent, we may safely venture to say, that no interest suffers more from ignorance than this. There are yet to be found among us many farmers of the old school, who have a hearty antipathy to anything like innovation upon established usages; and who regard the customs of their ancestors as quite good enough for this generation. Recent discoveries have abundantly demonstrated,

however, that the ways of our fathers were not always without error: and that to no subject can science be applied with more success than to Agriculture. The farmer who shuts his eyes to this great truth, stumbles upon the very threshold of his vocation. He rejects the experience and wisdom of all those, who, by long practice and soundness of judgment, may be qualified to throw new light upon the occupation in which he is engaged; and is thus left to grope his way in darkness, unassisted by anything but the glimmering twilight of his own judgment. The architect, when he erects a building, carefully compares the plan of his structure with such others as he may deem most suitable, and is thus enabled to avail himself of their experience to facilitate his own purpose.

Science may be defined a study of the immutable laws of the Creator which govern and regulate mind and matter. The study of these, and their application to the wants and comforts of life, have for ages constituted one of the highest and most useful employments of man; and have contributed more than any other human effort, to refine and elevate us above the gross and degraded condition of savage life. The success of Agricultural labor, its perfection and usefulness, is the strongest line of demarcation between civilization and barbarism. The concentrated benefits of these labors are now proffered to our hands. The pleasures and benefits which they impart, are offered as noble rewards to mental labor, in the same spirit that the blessings of health and competence are promised to him who earns his bread by the sweat of his brow. Labor, mental or bodily, is the inseparable attendent of rational enjoyment. It has been truly said that "an idle brain is the devil's workshop,"—if unemployed in useful works, it will be upon evil. And is that knowledge to be contemned, which has done so much good to the world; and which has countless blessings yet in store for the human family? "In a theological view," says an eminent writer, "science is nothing else than a rational inquiry into the arrangements and operations of the Almighty, in order to trace the perfections therein displayed. And what," continues our author, "*are* the truths which science has discovered? They may be regarded as so many rays of Celestial Light, descending from the Great Source of Intelligence, to illuminate the human mind in the knowledge of the Divine character and government, and to stimulate it to a still more vigorous exertion in similar investigations, just as the truths of Revelation are so many emanations from the "Father of Light," to enlighten the darkness, and to counteract the disorders of the moral world."

Agriculture is in the widest sense of the term, a *Science*. It is not, as some may suppose, a mere matter of drudgery, where everything depends upon the exercise of physical strength. True, a man may be a good farmer with a limited knowledge of those great principles of science which pervade all nature; but even he owes his success, in a great measure, to the practical knowledge which he has acquired by chance, or by an observance of the rules of others. To cultivate the soil with the highest degree of success, a man should understand not only the *effect*, but the cause. He should be sufficiently familiar with Agricultural Chemistry to be able to judge correctly of the nature of the soils—to ascertain in what they are deficient; and thus be enabled to apply the most judicious means for their renovation. Soils, we know, differ widely in their nature. Some lack one chemical ingredient—some another. So in the vegetable kingdom. A knowledge of agricultural chemistry would teach us that the grain and straw of wheat, rye and other grains, contain certain ingredients which are always found pre-existing in the collection of elements and compounds which abound through all nature. May we not then infer that these ingredients are the natural and proper food of such plants? And if, on investigation, we find these elements distributed promiscuously through the air, the water, and the earth, is it not evident that much good must result from a knowledge of their nature, and of the means necessary to apply them to the support of vegetable life? How important is it then, that science should be introduced more freely into Agriculture! And what better means can be employed than a school to illustrate the principles of science upon which the labors of Agriculture are based, and to teach the best modes of practice? A large portion of young men return from College or Boarding School to engage in Agriculture. Yet, during their sojourn in the halls of learning, they are instructed in almost everything but the knowledge of the very pursuit to which their whole lives are to be devoted. This is all wrong. We should have schools established in every county throughout the state, where in addition to the branches usually taught, Agriculture would receive that attention which it deserves. A farm should be attached to the institution, that an opportunity might be afforded of trying experiments, and that *practical knowledge* acquired, without which it is impossible to be a good farmer.

A more general diffusion of useful knowledge in a cheap form, is another means which might be profitably employed in advancing the interest of Agriculture. Within the last few years, a variety of publications have been issued devoted to this subject, and already their influence is beginning to be felt and may be seen in the rapid improvements which are every where going on in this branch of industry. By means of the press a farmer may communicate the benefits of his experience to his brethren in the most distant lands. New inventions, labor saving machines, &c., instead of being obliged to work their way into public favor by slow and toilsome marches, are there brought immediately before the people. Among those Agricultural Publications worthy of especial notice, may be mentioned the "Cultivator," published at Albany: the "Farmer's Library, and monthly Journal of Agriculture," published at New York, by Greely & McElrath; the "Farmer's Cabinet," published at Philadelphia; and the "American Farmer," published at Baltimore. All of these works have done much towards creating a spirit of enquiry among our farmers, and it is believed their more general circulation would be of increased benefit.

STABLES.—To prevent loss from the evaporation of the ammonia, all stables should be strewn with Plaster. By this means, the *Carbonate* of ammonia will be converted into a *Sulphate*, and thus deprived of its volatility. Besides the saving to be effected in the prevention of the escape of a valuable manure, the health of the animals would be greatly promoted and their eyes saved from many affections which now originate from the too pungent nature of the ammonia, which is continuously thrown off from the urine in its various stages of decomposition.

THE WAY TO ANALYZE SOILS.

When John Practice had brought the labors of another day to a close, and the shadows of the quiet evening were again thickening around the retired mansion of Practiceville, Science resumed his series of instruction.

I told you, said he, in my last lesson, that the analysis of soils was of the utmost importance to the farmer, and by no means an impossible thing for him to acquire. Its acquisition will amply repay the trouble it may occasion, and its value will be apparent at every turn of his business career.

For instance, I say emphatically that no man can be an *efficient judge of land without he can analyze soils.* I am aware many people by long experience have gained a certain knowledge of land, by which from superficial inspection, they can in some measure judge of its productiveness generally, and its particular adaptation to the growth of certain crops. But such *judges* are exceedingly liable to be deceived; in fact, no *certain confidence* can be placed in their opinion. They don't know the *constituents of the soil*—they never trouble themselves about the subsoil; its capacity for retaining moisture in dry weather; its organic and saline particles; its lime, magnesia, or iron—all these things which bear a most intimate relation to the fertility of the soil they never enquire into. The consequence is, that they do not know how that land will act in very dry or very wet weather—they do not know whether it will grow wheat, tobacco, or turnips—what manure it will require and whether it does vegetably or geologically contain the means for producing that manure—in fact, their judgment is little better than mere *shrewd guessing*; it may possibly be right; but there is no demonstration, or proof accompanying their opinion; the *why* and the *wherefore*, the reason and the foundation of their opinions are wanting; neither can they supply them.

The man who understands the *analysis of soils*, knows all *they* do in a more perfect manner—and he knows more. He can inform you what the soil is composed of, and how its composition will act under certain states of weather; how in dry weather; how in rainy—he will inform you what crops that composition will best grow, and what manure to supply to it to make up any deficiency. Hence this knowledge becomes of immense value.

See a farmer or emigrant setting out westward into unsettled regions, in search of a piece of land. Suppose him to be able to analyse the soil. When he reaches a favorable piece of ground, he commences an examination of its qualities. Boring into the earth he endeavors to ascertain the depth of the subsoil. With his humble apparatus he examines the nature of the soil. He will soon know its fertility and what it will grow. In an hour, he will know the humus or organic matter, the lime, the clay, and the sand it contains. He will have ascertained its power of retaining moisture; and will judge at once with an accuracy nearly approaching *certainty*, of the quality and capabilities of a piece of land he never saw before, and from which the hand of labor and art has never yet extracted support and wealth.

Set such a man on a farm which he has visited with a view of purchasing it, if suitable. It may be a *farm* exhausted by repeated croppings until its soluble salts and humus are taken out of the soil. In damp weather and certain seasons, such a farm would be possibly arrayed in a verdure of deceptive vegetation; but in its crops would be considerably deficient.

The analyzer of soils knows this; a skin-deep survey will by no means satisfy him. He must literally *look into* the matter. He tests the soil; he finds its soluble extracts, its nourishments, its feeding principles *gone*,—nothing remaining but a skeleton soil—a beggarly account of sand and clay, not worth the labor of recovering to a state of fertility.

MODE OF TAKING SAMPLES OF SOIL TO ANALYZE.

In analyzing a soil, the first matter requiring attention is taking the *samples* to be tested.—Soils frequently very materially vary in a limited compass—sometimes in the same field.—You will often notice at one part of a field a rank and luxuriant vegetation waving its dark green verdure in the sun, and in another part a thin, seedy vegetation, intermixed with broom heather, or rushes, will denote a patch of poor land. On river banks and upon the site of old forests are accumulations of alluvial deposits; or decayed vegetable matter, giving an extreme fertility to particular portions, which cannot be said actually to belong to the soil, though, of course, if these are extensive, they become a marked item in the value of a farm.

My own mode is to take an iron tube, something like a round cheese-borer, and about as long as a common walking-stick, with this I set out, and, at various places, I twist this borer into the soil, about a couple of feet down, or deeper, in those places in which I wish either to see of what the subsoil is composed, or test the deepness of the surface soil.

After pulling out the borer, I thrust out the earth with a stick, upon a table or board; it comes out retaining its shape, which I am careful not to break until I have examined it.—It is a round roll of earth, about two or three feet long, and about as thick as a mould candle.

As it lays before me, I can examine each layer of soil, through which the borer has passed. A bore in your wheat field "Tull" for instance is before us. About a foot below the surface, you perceive the earth is dark friable loam; it crumbles freely when you touch it, and yet if you squeeze it between your finger and thumb, it feels *fatty* and *sticks together.* It has a smell of rotting bark, or mouldering, damp wood. Without any analysis, you would pronounce that to be a fine soil. About fourteen inches from the top, the color of the soil becomes much lighter; it has less humus or decayed vegetable matter; it is, however, soft, and yet not stiff and clammy, like clay. It is evidently a calcareous soil; it must contain a considerable quantity of lime along with its sand and clay.

It is important that we should be *sure* about its containing lime, and know certainly whether it is a calcareous soil or not. We can test it. That is, we can subject it to a process which, *with lime*, produces certain results, and if, on applying the tests, those results follow in this soil, it is *proof* that it contains lime.

To ascertain this, I will take a pinch of this soil, and pour a few drops of *muriatic acid*,* (or spirits of salt,) upon it; if it effervesces, it is proof of lime being present; if it does not bubble up, like soda water, there is no lime. Well, there it is—you see it smokes and bubbles up in some degree. There is *lime there*,

* Sulphuric Acid, (Oil of Vitriol,) or strong Vinegar, will produce somewhat similar results, but not so certainly. Any thing that will unite with the base of lime, and liberate the carbonic acid gas, will produce this effervescence, which merely arises from the escape of the gas. If no effervescence occurs, it is a sure proof that there is no lime in the soil.

it is a calcareous soil; the quantity of lime we shall see by analysis by and by.

Further down in the tube, the soil becomes lighter and dryer—there is more sand in it as we get lower down; and at three feet we seem to have touched a rock, or else a large stone, which arrested our progress.

On the knoll, behind the farm-house, we took *this* other bore, which you perceive shows very marked traces of its formation. Within a foot of the surface there is a light, free black mould, interspersed with a considerable quantity of vegetable fibre, not decomposed; at fourteen inches down, we run at once into a grey soil, full of glittering particles, which continues as deep as we could get. This is decomposed or crumbled granite, the sand, clay, potash, and small quantities of lime and iron are decomposed, but the *mica schist* has not quite decomposed—it exists there in small shiny scales, something like fish scales. It is almost insoluble, but in time it will disappear.

Upon this decomposed granitic soil a forest has grown, and for ages shed its leaves, which have decomposed, and formed a soil containing largely of vegetable humus, amongst which are still the unrotted fibres and roots of trees and plants. This will make a fine soil.

This soil is not calcareous. You may see that at a glance; if there had been lime present, it would have decomposed those fibres long ago; wherever there is undecomposed vegetable matter, it is a proof of absence of lime. You see, by this, that your knoll *wants liming*, simply to decompose those fibres and make manure of them.

When you wish to *analyze*, get a good many of these samples collected, note down, as you thrust them out of the borer, the depth and appearance of the bore; and then take about half a pound of the earth about three inches below the surface, put it in a bottle and cork it up; paste a piece of paper on the bottle outside, saying where you took it from, and the depth of the soil; its appearance, and the nature of the subsoil.

You have, I will suppose, got your samples carefully collected, you must now endeavor—

To classify them into their kinds of soil; which is done more for convenience sake than anything else. The eye, the touch and the smell will guide you in this matter.

A *clayey* soil is well known by its stiff, adhesive nature: when the entire soil only contains 25 parts in 100 of pure clay, it will have a strongly adhesive property: 50 parts in 100 is a strong clay land.

A *silicious* soil (i. e. sandy) has the appearance of sand—the round gritty touch of sand; and will scratch glass. About 80 parts in 100 of sand, will constitute a free, dry soil, which may be considered sandy soil; though really sandy soils have sometimes from 85 to 95 per cent. of silicious particles.

A *calcareous* soil we have described above. A soil may be called calcareous when it contains 20 parts of carbonate of lime in 100 parts.

A *loam* is a mixture of sand, clay, (and lime, frequently,) in equable proportions: 75 parts of sand, 20 of clay, and 5 of lime, (with vegetable matter,) make a free working loam, and may be known by its friable touch when crumbled, and its adhesiveness when pressed. Sometimes it is red or yellow, caused by iron in the form of an oxide, and is then styled "ferruginous," or partaking of the nature of Iron.

A *slaty* soil is known by its abundance of vegetable fibre, and its comparative sponginess. If a red colored liquor is squeezed out, it is an undecomposed peat, and requires either lime or burning to dissolve its fibrous matter.

A *black organic soil* we have described above: it is known by its color, its smell of mouldy, damp, rotting wood, and its comparatively light weight, or less specific gravity.

Having classified the soils you wish to examine, you write down your opinion of them, judging from their appearance, touch and smell. It is surprising what great correctness in judgment of soils will be gained *at this stage* after a few experiments.

The things necessary to analyze soils, in the way of apparatus, are few and simple: any druggist keeps them, or can procure them at about the following prices:

A pair of scales, to weigh a quarter of a pound, which will turn with a grain—a set of small weights, from ¼ to 1 grain Troy, with about 100 grains of additional weghts, in 20, 10 and 1 grains,	cost. 75 cts. to $1
Two small wire sieves, or bits of wire cloth, bent like a saucer, the one large in the mesh as a pea, the other small as a mustard grain,	5 to 25 cts.
Three or four small vial bottles, holding each five ounces of water, (empty,)	12 "
A set of Hessian crucibles, say from 2 to 4 oz.	20 "
A wedgewood or glass pestle and mortar,	20 "
Six cents worth of filter paper, folded so as to hold ¼ pint of liquid, and greased at the edges.	
A glass funnel, (and if convenient to procure, about 2½ feet of half inch glass tubing, worth about 25 cents, is useful.)	
Twelve cents worth of muriatic acid, in a bottle with a glass stopper.	
Six cents worth of prussiate of potassa, in a common vial.	

The above, which can all be had for about two dollars, or less, will be sufficient, with the use of such things as a farmer has always in his house, to conduct analysis sufficiently correct for all practical purposes. Besides, most of the above things are extremely useful to farmers for many purposes besides the one here pointed out.—*Selected.*

WHEAT, BARLEY, OATS.—"One hundred parts of the stalks of *Wheat* yield 15.5 parts of ashes. The same quantity of *Barley*, 8.54; and *Oats* only 4.42 parts. Thus, as the demands of each of these plants for the alkaline elements of their growth is different, one may be raised on ground which has ceased to produce the others; and this is what is daily witnessed,—land, refusing to yield wheat, and yet affording excellent crops of oats, the proportion of alkali required by which is so comparatively small compared with the demands of the wheat crop. How readily, then, may a good soil from oats be rendered productive in wheat by the simple addition of some alkaline dressing, all the other requisites of fertility having been before present."—CUTHBERT W. JOHNSON.

THE CORN CROP OF MARYLAND.—We fear that the early anticipations of a large yield of corn in this state is destined to be disappointed, as we learn from various sections of the state that the ears have not filled well.

INDIAN CORN IN ENGLAND.

The English practice is to measure Maize, or Indian Corn, by the *quarter*; a quarter containing 8 Winchester bushels of 60 lbs. each, which amounts to 480 lbs. net weight, and by this standard are prices regulated. The highest quoted price at Liverpool was 48s. per quarter, which is equivalent to $10 66⅔ cents, United States currency.

The average weight of a bushel of Corn in our market is assumed by common consent to be 53 lbs., hence about 9 bushels are considered equivalent to an English quarter, as 9X53=477, which is only 3 less than the required weight of 480 lbs., but which it probably sometimes exceeds by that amount. The following, then, is assumed as correct:

Sale of 900 bushels, or 100 quarters, Indian Corn in Liverpool:

900 bushels, cost in Baltimore 70 cts. per bushel,	$630 00
Freight 9½d, primage 5 per cent.	180 00
Insurance 2 per cent.	16 38
Duty 1s. per qr.	22 22
Other petty charges, including landing, wharfage, Customs, entry, &c., and commission on sales	148 50
Expense of 600 bushels Corn laid down and sold in Liverpool	$1006 10
Net sales at 48 per qr.	1066 66½
Profit	60 56½
Exchange 9 per cent.	7 25
Net proceeds of 600 bushels in Liverpool	$67 81½

—*Lxford's Journal.*

GUANO.—The introduction of this substance into our country, should be contemplated as heralding a new epoch in the history of its agriculture. Very few, who have carefully tested its efficacy as a vegetable stimulant, entertain any doubt as to its value; while its concentrated and portable character—qualities of too much importance in the estimation of every economical cultivator,—bespeak for it a degree of popularity unprecedented in the history of any article of similar description, now in use.

We are the last person assuredly, who would knowingly and intentionally advocate any innovation likely to result harmfully to the agricultural interests of the country; but in reference to GUANO, we presume there can be no risque in incurring such expense as will suffice for placing within the reach of the dubious, the curious, and the skeptical, the requisite means for testing, practically, its value as a manure.

We have, the past season, made some few experiments with Guano on corn and other crops, and find its operation to be both immediate and powerful. On beans, we think it preferable to bone dust, and on the first named crop, its effects were indeed astonishing.

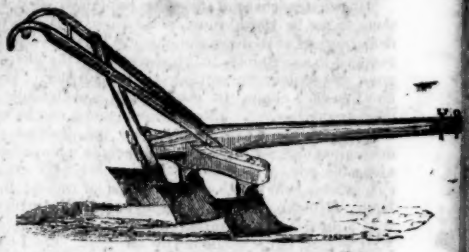
The very limited quantity required, and the facility of its application, are considerations which weigh heavily in its favor, and by the economical farmer, will by no means be overlooked.

In most of our cities and sea-port towns, Guano can now be obtained in almost any quantity desired, and at a reasonable rate. Our advice is, "*try it.*"

A PRACTICAL FARMER.

[*Germantown Telegraph.*

Bulbous and Flower Roots.—These should be planted out.



BALTIMORE, OCT. 21, 1846.

To the Editor of the American Farmer.

DEAR SIR,—We notice a communication in your October No. signed "L. R." who refers to our Barring plow, and enquires relative to the Expanding Cultivator—wishes to see a cut of it, &c. We regret that we have no cut of this implement, the article being so commonly used is the cause of its omission. This implement however is a frame formed like the letter ⊱ in which is placed five tines shaped like a shoemaker's horn, and attached is also a pair of handles to guide it by. This implement is much used in this State for cultivating Corn, and answers a good purpose unless the ground is hard and there is much grass.

The Cultivator is now nearly superseded by our 2 and 3 furrow Plows, as will be seen by the cut of our 3 furrow Plow (heading this letter,) the furrows are all thrown in the same direction, cutting a five inch furrow, and pulverizing the ground similar to the ordinary plow; the mould boards are made of cast iron, and have a double edge or made to reverse when the lower side wears dull. We may also remark that these mould boards are secured by strong cast iron bearings, and seldom, if ever, break in the roughest lands—the 3 furrow Plow is used by our farmers for seeding oats and wheat, and the 2 furrow for cultivating corn.

The barring and ridging Plow as shown by a cut in one of the Nos. of your paper, is made with right and left standards and a shoe horn cultivating tine in front. It is intended for forming ridges, and for cultivating the Tobacco plant. If your correspondent will furnish us with his address, we will send him our descriptive Catalogue of Implements, and a card containing about 50 wood cuts of our most valuable machinery.

Very respectfully, yours,

R. SINCLAIR. JR. & Co.

☞ One horse will draw the 3 and 2 furrow plow with about as much ease as the ordinary cultivator.

DEEP PLOUGHING.

(EXTRACT.)

"Here, permit me to say a word in relation to the question of deep or shallow ploughing, which I have recently seen discussed in the Farmer. My opinion, which is founded entirely upon experience, is decidedly in favor of the superior utility and value of deep ploughing. For about 20 years I have been ploughing as deep as I could on the farm where I now reside, without having in a single instance injured the crop; and more than this, I have, in the mean time, restored the land from the most extreme state of poverty to that of at least good farming land; indeed, a great deal of it is as rich as is necessary for a wheat crop." * * * *

"In whatever way it may be explained, it does seem to me to speak most powerfully in favor of deep, instead of shallow ploughing. In my view it is reduced to a certainty, that just so deep as the plough goes, just so deep the soil goes and no further. The question then comes to this, which is preferable a deep or shallow soil? about which there can be no dispute. When I first commenced the practice of deep ploughing on my farm, the people who passed along the road would stop and enquire, with great earnestness, whether I was not afraid of ruining my land. After expressing my conviction of its utility, they would most generally reply, that it might do for your wheat, but it would not do for corn. But I can only say, that I have found it best for every crop."

JOHN H. CRAVEN."

THE AMERICAN FARMER.

BALTIMORE, NOVEMBER, 1846.

MARYLAND FARMERS' CLUB.

The next meeting of the Club will be held at the office of the President, John Glenn, Esq. in North Charles st. on SATURDAY, 14th inst. at 11, A. M. A full attendance is particularly desired, as the election of officers for the ensuing year will take place.

By order, SAML. SANDS, Rec. Sec.

FINE STOCK.—It will be seen by the communication of our correspondent, "*Patuxent Planter*," that a number of fine animals exhibited at the late Fair of the Philadelphia Association, have been purchased and brought into this state, by some of our public spirited citizens—and we noticed, as he passed through this city, an uncommonly fine young Bull of the Ayrshire breed, purchased on the same occasion (when he took a premium,) by Mr. McHenry, of Harford county, Md. This gentleman has a number of this breed, and is in the daily expectation of receiving a bull and two cows which have been shipped at Liverpool in the ship "Rhone" of this port, carefully selected for him by a relative in England—Mr. McHenry has been breeding from the stock imported by Dr. Hoffman some years ago, and which were so much admired at the time—some of the same importation were obtained by Gen. Howard, who, it will be seen by advertisement, has a bull for sale. Mr. Phinney, in a report made in regard to a recent importation by the Massachusetts Association, (which will be found on another page,) speaks of the high estimation in which the Ayrshires are held in Great Britain.

Mr. Aaron Clement, it will be seen by advertisement on our advertising page, offers his services to the public, for the purchase and sale of improved breeds of cattle, sheep, swine, poultry, &c. and we can with confidence assure our friends that their wishes and interests will be duly consulted, by engaging his services. A number of fine animals purchased by our Prince George's friends, were obtained from Mr. Clement.

THE HESSIAN FLY.—We regret to learn that the Hessian Fly has commenced its autumnal ravages upon the wheat fields in some of the counties of our state. This is to be deplored, as there is no *certain* remedial means to arrest its destructive course. We will mention, however, one which we have seen recommended that carries something like plausibility with it. It is, to sow fresh slacked lime over the plants while the dew is on them, in early morning, or after dewfall in the evening.

THE CROPS OF EUROPE.

From the best and most recent information which we have received from Europe, there can be no doubt entertained that the crops of England, France, Portugal and the Germanic states, are less than average ones, and that the deficiency for each will have to be drawn, *in part*, from our own abundant surplus of wheat and corn. Whether the crops of the Black sea and the Baltic have also proved short, we are unable, from the advices we have received, to determine. Should it however, be the fact, that the bread crops have also failed in the countries bordering on those seas; our country will find markets and good ones in each of those countries where a deficiency of breadstuffs may exist, because of the source of supply which hitherto was relied upon having failed.

That the Potato crop in Ireland has proved an almost total failure there is no doubt—that the same crop has partially failed in England, and in Scotland, there is as little doubt. In Scotland, superadded to the loss from the potato rot, they have to suffer from the rot in the *turnip* crop—a crop which, in that grazing and beef fattening country, is as important to her as is the potato crop to Ireland; for while the former consume turnips in the form of *beef*, the latter consume the potatoes themselves.

With the fact of short crops of the breadstuff grains, in the countries we have named, the total failure of the Potato crop in Ireland, its partial failure in England and Scotland, it must be obvious, that the demand for our surplus wheat and corn, to send thither, must be greatly increased—and unless the extent of those failures have been greatly exaggerated, it is fair to infer, that prices will very sensibly improve from the very natural operation of those laws which govern demand and supply.

While we are upon the subject of the failure of wheat crops abroad, it may not be amiss to state, that we believe much less wheat has been grown in America than was anticipated a few weeks before harvest. Of the crop in this *State*, it is within a reasonable calculation to say, that it has proved to be far below an average yield—and that, while the product has disappointed expectation, the *quality* does not, by any means, make up for the deficiency in quantity, as that also has failed. This failure in *quality*, we believe, is not confined to any particular geographical lines, but extends more or less throughout the entire range of the wheat growing states. If this be the fact, then, an enhanced value cannot fail to be imparted to all wheat of *superior* qualities, as the demand for such wheats will, we believe, largely exceed the supply.

Rye, owing to the failure of that crop in Germany, is being exported thither, to be converted into Gin, which circumstance will improve the price here.

Taking a comprehensive view of the condition of England, Ireland, and Scotland, with regard to the crops upon which they sustain their population, and fatten their beef, pork and mutton, we remain of the

same opinion we have heretofore advanced, that our corn will continue to find there a profitable market, and a largely increased annual demand.

We have thus briefly sketched our views of the prospects in store for our agricultural brethren, considering it to be our duty to keep them advised in matters so deeply interesting to them. In these views we may be mistaken—they are, however, honestly entertained, and based upon what we consider reliable data.

Wheat, Flour, Breadstuffs, &c.—The following article, which we copy from the London Shipping Gazette of October 2, will be read with interest:

Though wheat has risen in value about 15s. per quarter since the end of July, and prices of other descriptions of grain are nearly the same proportion, an opinion is prevalent that quotations will be much higher during the approaching winter. The grounds for this belief are the ascertained deficiency in the produce of all spring corn, and the extensive failure of the potato crop. That Great Britain will require a very large importation of grain before the next harvest cannot be questioned; and as the stocks of old grain are comparatively insignificant all over Europe, whilst the harvest of 1846 has turned out more indifferently on the Continent than in England, it may be difficult to secure the requisite quantity. To succeed in doing so, it will certainly be necessary to pay high prices, as their own necessities will render our continental neighbors more than usually tenacious in parting with their produce. Prices have already got up considerably at all the leading ports in the Baltic, and by the *Britannia* steamer we learn that the expectation of a failure of the potato crop in Europe had caused a rise in the value of flour of three-fourths of a dollar per barrel at the principal markets of the United States. We are, however, glad to learn from thence that the yield of both wheat and Indian corn was abundant over the greater part of North America. The latter article, it is true, had not then been secured, but it was in so advanced a state as to be considered out of danger. Great as are the resources of the United States, it would be unwise to calculate on anything like a supply from thence adequate to our wants; and the idea that the price of wheat will continue to tend upward does not, therefore, appear to us at all reasonable. The deliveries from our own farmers, which have recently been on a very liberal scale, are now beginning to fall off; and, for some time to come—until the sowing of the autumn crops shall have been completed—the supplies of home-grown wheat are likely to be moderate; even a temporary reaction in prices seems, therefore, improbable. Such, at least, appears to be the present impression; and at all the principal provincial markets held during the week, merchants and millers have shown so much anxiety to increase their stocks as to give sellers the opportunity of realizing an advance of from 3s. to 4s. per quarter on previous rates. The arrivals of wheat coastwise into London have been quite moderate since our last, nor has the quantity exhibited at Mark-lane by land-carriage samples been by any means large. On Monday the show from Kent, Essex and Suffolk was less than on that day week, and the stands were cleared without difficulty at rates 3s. per quarter above those current in the commencement of the preceding week. Since then factors have insisted on a farther rise of 2s. which has in some measure checked the demand; still, a fair extent of business was done this morning at that advance. Foreign free wheat has met with attention, and has risen in value quite as much as English. In bonded hardly anything has taken place, not so much from the want of demand as from the scarcity of good qualities, and the extravagant terms at which the finer kinds have been held.—The duty fell to 8s. per quarter yesterday, and will recede gradually to the *minimum* point. On Monday the town millers rose the top price of flour to 36s. per sack, at which improvement the sale has since been rather free. For the best fresh of United States Flour 34s. and 36s. per barrel has been paid, and secondary sorts have brought corresponding terms.

The editor of the *London Circular to Bankers*, than whom a more careful observer does not exist, has just published the result of his recent investigations into the state of the crops. The editor observes:—

"The spread of the disease has been signally arrested, and a much larger proportion of the crop of potatoes in Great Britain, and we suspect also in Ireland, will, we trust, be preserved than any man dared to hope for a few weeks ago. This is so far extremely satisfactory, and has afforded us great relief. No doubt this disease will prove a severe and trying calamity under the most favorable circumstances, but we may now rationally indulge a hope that it will not prove utterly destructive of that important resource for the annual supply of human food, the crop of potatoes. There is no important substance, no material proportion of anything raised annually in great bulk for the sustenance of civilized man, which is so liable to waste and destruction as the potatoe; and we have no doubt in ordinary seasons one half of the usual crop is, in Great Britain, either used for cattle or wasted, and that not more than one half is converted directly into food for man. This suggests a very interesting reflection at this juncture, for if only one-half of an ordinary crop be applied directly to human food, a much smaller than a usual supply would prove adequate to that purpose, exclusively, provided there be an abundance of other food fit for cattle, to be substitued for the potatoes and preserved roots usually given to them. Then how stands the case as to that point, of a much larger proportion of the potato crop being under the exigency applicable to the use of human food, because the abundance of other kinds of the food of animals will cause a much smaller demand for pototoes to feed them?"

With regard to other crops required for feeding the cattle, he says he feels justified in stating, "that there is a large produce of turnips this season—provided they can be preserved so as to be available. Then there is the largest supply of grass, clover, lattermath, and hay, collectively, ever known in England." Hence, as food for animals, potatoes will not be used to any considerable extent, if at all required.

With regard to the stock of old wheat, he asserts his conviction, founded on careful observation, "that with the single exception of 1845, the stock of old wheat is larger than it has ever been at harvest time since the autumn of 1837, though it is very much less than it was at the present date of 1845." The points of the case, which investigation has established to the satisfaction of his mind, he states to be:—

1. That the potato disease is not so bad as public feeling and the public press have represented it; that it has been signally checked in its ravages, and has probably, in great measure, spent its force for this season; that the abundance of food for cattle will li-

berate an unusual proportion of a diminished annual supply of potatoes for human food, consequently, that the store of potatoes may, with economy in the use, enforced by a higher price, be sufficient to serve the people for food in reduced rations for three fourths of the time that potatoes annually serve for in ordinary times and seasons—the writer has this week seen and tasted good potatoes which were dug up in October, 1845.

"2. That the wheat crop of England approaches nearly to an average crop—being such as to prove more deficient in measurement than in its ultimate results in the shape of flour and bread. That, although hot parching weather has in some quarters rendered the grain small and flinty for the want of gradual ripening, especially in the northern counties, it is generally of excellent quality for manufacture through all processes and their products; by giving stronger flour and more bread, it has a smaller proportion of refuse than is usually found in average wheat crops; the weight per bushel exceeds the weight of most good well secured crops; and, therefore, it is not to be estimated by measurement alone, which this year is not quite so perfect a criterion as in most seasons."

Ireland.—The condition of this country is as wretched as ever. The distress and desiitution consequent on the failure of the potato crop is really awful. Serious riots have occurred in different parts of the country, particularly in the county of Waterford, large mobs having attacked the bakers' shops for the purpose of obtaining bread. On the 28th a more serious riot took place at Dungarvon. The mob mustered ten or twelve thousand strong, and were about to attack the merchants' stores, but a troop of dragoons, which arrived in time, had to charge them repeatedly. The people, however, continued to throw stones, and the state of affairs began to look very serious. The dragoons were then ordered to fire, and it is said that about twenty shots were discharged. Two men were seriously wounded.

JOHN S. SKINNER.

The Worcester Transcript contains the following well deserved compliment to the Address delivered by our late fellow townsman, John S. Skinner, Esq., before the Agricultural Society of Worcester County, Massachusetts. Those who are aware of the vast powers of Mr. Skinner's well stored and disciplined mind, will look upon his successful effort at Worcester as a matter of course, as it would have been passing strange, had he delivered an address which was not marked by superior knowledge and fine taste, upon the business and objects connected with agricultural pursuits. It is now some twenty seven years since he *founded* this Journal, and though often filling high and important trusts, he has always found time to turn to his favorite science—Agriculture—and hence it is, that his agricultural writings abound throughout our land, and his name is a kind of household word in the family of each intelligent farmer and planter from the Atlantic to the far-off West.

"The address of John S. Skinner, Esq. so widely known as the distinguished editor of the Farmer's Library, and as the author of some of the most valuable writings on Agricultural Science that have appeared in this or any other country, was a most able and splendid production, and fulfilled the high expectations that had been previously formed in this community. Of Mr. Skinner's appearance, we have only all when we speak of him as one of nature's most eminent noblemen, both physically, mentally, and in every other respect. His address was replete with valuable, practical and scientific thought, and when published, as we understand it is to be, will be found worth its weight in gold."

Cure for the Caterpillar.—A gentleman at Galashields, Scotland, has discovered that exhausted bark spread on the surface round the roots of gooseberry bushes, is an effectual remedy for the caterpillar. A more simple and cheap remedy could scarcely be wished for. A cart load of the bark, which costs about sixpence, is amply sufficient for the largest garden.

SARSAPARILLA BEER.

To the Editor of the American Farmer.

Sir—Much Fever has prevailed during the last summer in the south, and in the treatment of every variety of this malady, much *calomel* has been used. It is generally understood, that after a cure is effected, an expellant of the remains of the Mercury, from the system, is absolutely necessary—hence those that can attend *Sulphur Springs* for a season do so. But it is also understood, that the *essence* of *Sarsaparilla* has the effect of cleansing the system. If so, it would be invaluable to the poorer class of people, who cannot afford to go to the springs, to be able to provide the article, in a form that would be found effectual.

It has been recommended by a medical gentleman in the south, to use *sarsaparilla* in the form of a Beer, for a common drink, and I have determined to call upon some of your intelligent readers, acquainted with the best modes of fabricating Beers, for a recipe that would produce a *Sarsaparilla Beer.*—To further it will be a work of benevolence and humanity.

A Subscriber.

METEOROLOGICAL TABLE, FROM 28TH SEPTEMBER TO THE 28TH OCTOBER.

Kept at Schellman Hall, near Sykesville, Carroll co. Md. Taken at 6 o'clock, a. m., 2 o'clock, noon, and at 6 o'clock, p.m.

	Wind.			Temperature			Remarks.
28	W	W	NW	48	68	59	Clear
29	N	S	S	46	72	64	Clear
30	S	S	S	50	75	68	Clear
1	S	S	SW	55	77	70	Clear [electricity
2	W	W	W	53	77	61	Fog Clear Heavy rain (much
3	N	N	N	56	63	60	Cloudy Clear
4	W	S	E	52	59	60	Rain 5-8 in Cloudy
5	W	W	W	57	66	63	Clear
6	W	S	S	47	70	63	Clear
7	W	SW	SW	54	74	70	Clear
8	S	S	S	55	78	70	Clear
9	SW	W	W	54	78	70	Clear
10	NE	N	N	55	63	55	Cloudy, Clear,
11	W	W	W	40	60	54	Frost Clear
12	W	S	S	38	69	60	Cloudy
13	NE	SE	NW	61	67	60	Rain 3 in water
14	W	W	W	51	58	57	Cloudy Clear
15	W	W	W	47	62	51	Clear
16	W	S	S	46	68	63	Clear
17	S	S	SE	56	75	70	Clear
18	NW	NW	NW	48	47	45	Cloudy Rain 1-10 in Clear
19	W	W	S	32	50	45	Frost Clear
20	W	W	W	29	55	50	Frost Clear
21	W	W	W	40	56	48	Frost Clear
22	W	W	W	30	56	48	Frost Clear Cloudy
23	W	W	W	35	52	48	Frost Clear
24	W	W	W	43	63	55	Clear
25	W	W	W	36	61	45	Clear
26	W	SW	SW	30	61	55	Clear
27	SW	S	W	54	68	63	Clear Rain in the evening 1-3
28	N	NW		43	53		Cloudy [in. wat

HORTICULTURAL.

NOVEMBER GARDEN WORK.

In this month there is not much actual labor to be done in the Garden, yet there is sufficient to justify memoranda to be made; and the more especially is this necessary, in our estimation, as we hold the firm belief, that there is no department of even the best regulated farm which brings so much solid comfort to the homestead as does a well arranged and neatly cultivated garden. So indispensable do we hold it to be, for every culturist to pay attention to this branch of his duty, that we should look upon the individual who neglects it, no matter howsoever attentive he may have been to his fields, as but an indifferent manager. Besides the luxuries and sources of comfort to one's family to be derived from it, there is still a nobler incentive than that which centres in the gratification of the palate, we mean that which springs from the delight which our wives and daughters derive from contemplating the rich floral and vegetable display that always abound where the husband and father has, as becomes the obligations of his relationship, fulfilled his duty to his family, by providing them with a neatly arranged, well filled and cultivated garden. Passing from these prefatory remarks, we will name certain things which should be attended to without delay.

Cabbages.—Before the frost sets in too hard, the cabbages should be taken up and safely stored away so as to preserve them from decay through the winter. We have seen many plans recommended, but after all we have seen none which affords greater protection than the old fashioned one, of transplanting them in a dry bed with a good southern exposure—each cabbage placed close together with an inclination to the north,—the whole to have a tight covering raised over them composed of forked posts and poles laid across, and these surmounted with cornstalks, straw, and pine brush to keep out snow—the front should be pitched sufficiently high to admit of a person to go in to cut off the heads through the winter, while the rear should decline to, and be even with, the earth. An inclination of 45 degrees would probably be about the right one. Thus secured, cabbages will keep well till spring and always be accessible.

Asparagus beds.—If you have not already done so, you should give your asparagus beds a thorough dressing. Cut off the stalks, and such weeds as have sprung up, close to the ground, rake them in a pile; let them remain for a few days to dry, then set fire to the whole, and when burnt, rake the ashes evenly over the bed. Then make a compost of 7 parts well rotted stable manure and 1 part ashes. Spread this in the alleys between the rows of asparagus and dig it well in. This done rake the ground finely, and strew thereon a mixture of salt and plaster, or salt and pulverized charcoal, in equal proportions, so as to cover the surface of the earth well. Then dress up the edges of your beds evenly and your work for the winter will have been completed.

Spinach, Corn Salad and Winter Cresses.—The beds on which these vegetables may be growing, should be weeded and thinned out as early in this month as possible. Be sure to perform this work before the hard frost sets in.

Roots of all kinds.—Be sure to dig your garden roots before they are injured by the frost, and carefully store them away in some safe place where they will keep without rotting through the winter.

Rose Bushes and Flowering Shrubs.—Flowering shrubs of all the hardy kinds may be set out with a perfect certainty not only of their living but of bearing flowers next spring. In taking them up for transplantation be careful to injure as few of the roots as possible. Should, however, any of the roots be injured or broken they must be smoothly cut off. Unless the place where you plant be rich, mix with the earth an equal quantity of rich mould and well rotted manure to fill up with.

Grape Vines.—If your garden is not already supplied with grapes, buy a vine or two from some of the nurseries, and plant them out as early as possible. If you do so early this month they will bear fruit next season. The best manure to use would be a compost consisting of 4 parts mould and leaves from the woods, 2 parts well rotted manure, 1 part ashes and 1 of lime, to be thoroughly mixed together.

Rhubarb and Sea-kale.—Sow the seeds of these without delay.

Garlic, Chives, Shallots.—These may be set out any time before the ground freezes.

Sage, Thyme, and, indeed, all the *medicinal* and *pot-herbs* may be set out this month, the earlier the better.

Cauliflowers and Broccoli.—These will now be forming their heads, so that it will be necessary to break down some of the large leaves, so as to protect the flowers from the effects of the sun, rain and frost.

Celery.—Continue to throw up the earth around your celery plants to blanch them—they should be earthed within 6 inches of the tops.

Strawberries.—It is not too late to set out a bed of this delicious fruit, and we would advise all who may not have one in their gardens to seize the occasion to supply the deficiency. If there be no nursery near from which to procure the plants, it should be borne in mind that the wild strawberry transferred to the garden and well tended greatly improves in *size*—in its quality no improvement is needed.

Artichokes.—These should receive a winter dressing.

Dahlia Roots.—Take up your dahlia roots, and bury them in your cellar in *dry* sand.

Gooseberries, Currants and Raspberries.—These may all be transplanted this month. If you have none in your garden, procure some of each and plant

them out, in order that your family may not be another season without a plentiful supply of fruits at once so delicious and healthful.

Figs.—If you have any fig trees in your garden, late in this month, pick off all the unripe fruit, surround the roots with long manure, and the branches, by nailing bass-matting so as to protect them from the weather. If you have no matting, pine bushes placed up against them will answer.

We have thus briefly sketched a few of the things which should be attended to, and invoking the matron of each farmer and planter's home, to aid us in our desire to see the business, the luxuries, and the beauties of the garden become objects of pride, pleasure, and ambition, with all, we shall conclude our month's talk, by the expression of the hope, that every earthly blessing which tends to increase human happiness, and the comforts of life, and to make us grateful to the Giver thereof, may abound throughout our land.

GRAPE CULTURE.—It is laid down as a maxim in Grape culture, that no vine should be permitted to ripen its fruit until its stem measures 3 inches in girt just above the ground; and that it is best not to let bearing vines produce a superabundance of fruit, as the consequence is injuriously felt for many years.

From a long course of experiments, Mr. Hoare has computed the following scale of the greatest quantity of grapes which any vine can *perfectly mature*, in proportion to the circumference of its stem, measured just above the ground:

When 3 inches in circumference,			5 lbs.
"	3½	"	10
"	4	"	15
"	5	"	20
"	6	"	36
"	7	"	45
"	8	"	55
"	9	"	65
"	10	"	75

From the Genesee Farmer.

MANAGEMENT OF FRUIT TREES.

MR. EDITOR:—It is not my design to give you a labored discussion on this subject, but merely to state the results of my own experience, together with a few remarks thereon.

1. *Transplanting.*—I am well aware that a diversity of opinion exists in regard to the time of transplanting; some preferring the fall of the year, others the spring. My own preference would be this: If I could have my trees taken up with the roots uninjured, I would prefer the former season; otherwise, the latter. My reason is this: If the roots be much injured, the tree will suffer by evaporation before the growing season commences. In regard to the root, I consider it important, that all those that are broken and torn be cut smoothly off, that the wounds may heal readily. I believe that the neglect of this is one cause of the premature decay of some trees under circumstances that often seem difficult of explanation. At any rate, a shattered root will necessarily rot and injure the tree. I have seen trees that did not appear to thrive well after having been transplanted a few years, and upon examining the roots, have found them broken and decayed. Having removed the entire portion and replaced them in the earth they have afterwards done well.

Pruning should also be attended to at the time of transplanting. Many, perhaps most, people retain all, or nearly all, the head, or top. On the other hand I cut off all, or nearly all. I reason thus. The root, even at the best, has been considerably injured, having lost many of the small branches. The top, or head, at the time of taking up the tree, was as large as the root uninjured was capable of supporting. Unless, therefore, a considerable portion of the top be removed, the root will not be able to support it, and the tree will not thrive. If the top is cut away, the roots will make as much top as it is able to support. Hence I cut off all, or nearly all, the top at the time of transplanting; i. e., I trim the tree, if small, up to a single stem; if large, in proportion. Whether my philosophy be correct or not, I not only seldom lose a tree, if it has even a tolerable root, but generally find my trees to grow almost as thriftily as if they had not been removed. Besides, I have frequently restored an apparently dying tree to health and vigor, by cutting off nearly all the top, even in mid-summer. The reason is plain: if the evaporation from the leaves exceeds the supply of unappropriated moisture taken in by the roots, the tree will die, or at least suffer, from mere exhaustion. Hence, restrain the evaporation; i. e., cut off the top, and the tree may be saved.

2. *Annual Pruning.*—On this subject, I am in favor of pruning in the spring or summer, rather than in the fall or winter, especially for the peach and the pear. My reason is this: I have observed, that wherever a limb has been cut away in the latter season, it does not heal over readily. The bark turns black and dies around the wound, leaving a dead spot two or three times the diamater of the original wound. I do not know that this is always the case, but I believe it is generally. I have observed this effect only on the peach and the pear.

In regard to the manner in which the pruning should be performed, every limb, or branch, that is removed, should be cut close to the bilge or swell at its base, and be cut *smoothly* off. The murderous practice of some, of chopping off the branches with an axe, either mangling the body of a tree, or leaving a stump several inches long, split perhaps, and haggled, to rot and injure the tree, cannot be too severely reprehended. I have now in my orchard a valuable apple-tree, which had been *trimmed* in this manner before it came into my possession, every wound of which might have been healed by this time, had the pruning been properly performed. It will now require several years to complete the process, and what is worse, one of the mangled stems has decayed down *into* the body of the tree, and still continues to decay, and also bleeds considerably. (How can I prevent the bleeding and further decay?)

While on the subject of pruning, allow me to say a few words on the management of trees that have been newly grafted or budded. It is well known that when a branch, or the whole head, of a tree has been cut off, and a graft inserted, a number of young shoots start on the sides of the stem. This is caused by an excess of sap in the stock, which the graft, even if it grows, is unable to appropriate. I have been asked whether it is proper to remove these shoots as fast as they appear; I answer, by no means, especially if

much of the head of the tree was cut away at the time of grafting, or budding. It may perhaps be safe to remove a few of them, but in general it is far better to let them remain till the tree shall have done growing for the season, or till the season for pruning, when they may be removed. The leaves of a tree serve for the purpose of absorption, digestion, and respiration. They absorb nourishment from the atmosphere; hence, if the foliage be taken away, the tree will *starve* for want of sustenance. Further, if the food derived from the atmosphere, as well as the sap derived from the root, be not properly digested, (as they cannot be, if the necessary amount of foliage be not present,) the tree will sicken, and perhaps die. Hence these young and apparently superfluous shoots should be left, or but sparingly removed, during the season of growth, and be cut away afterwards. This lesson I learned by experience, having lost a valuable apple-tree by pinching off all the young shoots as fast as they appeared, leaving only one small graft to receive (as I supposed) all the nourishment afforded by the root. The tree began to decline early in August, and died in a few weeks.*

3. *Cultivation, or management of the trees after being set out.*—To ensure a thrifty growth to the trees, (which may generally be done even the first year after being transplanted,) it is absolutely necessary that the surface of the ground around them be kept loose and moist. Hence frequent hoeing, and, if dry, watering, are all important. I feel assured, that more depends upon this, than upon almost anything else. Let the soil be kept loose and moist, and there is little danger either of disease or death. I have now two apple-trees which, having been set in a stiff sod, had not grown over two or three inches during the last two years. The last spring I removed the sod around them and loosened the soil, and they have already grown nearly a foot, and I confidently expect a growth of several feet during the present season.

A few remarks shall close this hasty and unsystematic scrawl. And first, in regard to ants. If these prove troublesome, they may easily be destroyed or driven away by the free use of urine (human.) If, however, it is not convenient to apply this, let the ground be dug up to the full depth of their habitations, well mixed together, (to which urine,† or a little ashes, or lime, or all, may be added,) and afterwards tread down hard. Let it remain so a few days and again repeat the process if necessary, (as it sometimes may be,) and the object will soon be gained.—The best time perhaps is the morning, when the ants will generally be at home. When they are found to be destroyed, the ground may be dug up and cultivated as usual.

I will add, that although not a "Farmer," yet I consider your paper worth, even to *me*, far more than it costs. Indeed I consider each number worth a year's subscription to every "Farmer," and only wonder why any one should be willing to be without it. B.

*Perhaps my ill success in the above instance may have induced me to run into the opposite extreme; and it may be, that the best course would be a medium between the two. Some further observations and reflections on the subject have induced me to modify my statements a little. In regard to grafts or buds, if they were set on a small stock, (the whole top being removed,) *some* of the shoots that afterwards spring up, may, I think, be safely removed, (those nearest and most in the way;) but, as a general rule, I would not exceed about one-third of them, or one half at most. I am of the opinion, however, that a better method is, to remove a few of the nearest, and to clip the ends of the remainder; and thus preserve to the tree the office of the leaves, while at the same time we should thereby, for a while at least, throw more of the growth of the tree into the other branches, (the grafts.) The clipped shoots might afterwards be cut away when the tree had done growing for the season, or at the time of the annual pruning.

If the grafts were set on the scattered branches of a large tree, (on which some, perhaps many of the branches remain,) it will doubtless be safe and profitable to remove most, or even all, (?) the young shoots, especially if the stock, or stump, on which the graft is set, have other branches growing on it a little distance below the graft. I would, however, prefer to cut them several times during the season, rather than to remove them in too great a mass at one time.

†I find this to be an excellent application to fruit-trees of any kind. Let the soil be loosened and the liquid poured around the root.

Fairport, June 1st, 1846.

CULTIVATION OF FRUIT TREES.

To the Editor of the American Farmer.

SIR—Your correspondent L. R. wishes for an explanation of a part of my communication, on the cultivation of Fruit, in the May No. of your valuable journal. Probably a history of the discovery, for such it is as far as I am concerned, would perhaps furnish the best explanation I could give. When a few years since, I first turned my attention to the cultivation of Roses, cuttings of rare and valuable varieties would sometimes be given me having only a very few buds such as are generally considered good, and terminating in one or more small spurs or limbs of half inch to one or two inches in length, either with roses on them or that had just bloomed, the buds on which spurs are usually too small for working. It occurred to me that I could lose nothing by cutting out and inserting these spurs exactly as I would ordinary buds, and I was pleased to find that frequently these succeeded when the other buds failed. I then tried longers hoots, something near a foot long, and with equal success. Again it sometimes happened that when I wished to insert other buds, they had already started, and as I could not always afford to throw away most of the few buds I could get, I determined to try these too in the same way, and was pleased to find that these frequently grew off without wilting their leaves at all, and succeeding sometimes when the dormant buds either failed or pouted.

Having commenced cultivating Fruit trees about the same time, and being naturally anxious to taste some of the Pears that had celebrity, I thought that by inserting the fruit spurs in the same manner into quince stocks, I might have very dwarfish trees, that would produce fruit very soon, and I think that I have not been disappointed in either expectation, as I have several trees that have borne fruit or blossomed, that are much smaller than any that were sent me as dwarfs, and have borne fruit several years sooner, as many of the parent trees have just begun also to bear, though my experiments were not commenced until several years after they were received. As I kept no memoranda of these things, I cannot be more particular. The term budding, cannot, with propriety, be applied to this operation, but it conveys a correct idea of the operation, I think, nor is it strict-

ly speaking, at least, according to any of the methods described in books, that I can recall. I graft all the year with equal success, except the months of November and December, in this climate. I also bud whenever the bark will separate freely, and I can procure buds. Last *March* I budded and saved some new roses I received from Paris, and I have budded them with fair success in November, after the frost has killed our crops, and I have moved to the plantation. It is not always that cuttings can be procured at the time L. R mentions, nor do I think that they could very easily be kept as long as would be necessary in our warm and dry climate. Sometimes trees that are purchased at a distance have only a small straight stem with a few lateral shoots, one or two inches long, in such a case, how would L. R. proceed in order to secure the variety, if he was afraid that the parent tree would die? I would make one or two grafts of the terminal or upright shoots and *bud* in the spurs as soon as budding could be done. This operation has most *or all* of the advantages of both budding and grafting without the disadvantages of either. The Smyrna melon has been cultivated here, and I might procure a few seed for your correspondent. It is really fine, I believe—I had one vine, but all the melons rotted, and I have saved no seed—L. R. would probably find that the South Down is the best breed of sheep, being as early maturing as the Bakewell, and a better breeder and nurse, and furnishing the best lamb, mutton and wool, after the Merino. I remain your well wisher and subscriber.

ROBERT CHISOLM.

Ladies' Department.

FLORICULTURAL.

FLOWERS.—If Ladies wish to get into the very best company possible, we do not know of any pleasanter way than is detailed in this beautiful scrap from a German poet:—

A flower do but place near thy window glass,
And through it no image of evil shall pass.
Abroad must thou go? on thy white bosom wear
A nosegay, and doubt not that an angel is there;
Forget not to water at break of the day
The lilies, and thou shalt be fairer than they;
Place a rose near thy bed nightly sentry to keep,
And angels shall rock thee on roses to sleep.

NOVEMBER WORK—FLOWERS.

Prepared for the Farmer, by Samuel Feast, Florist.

Greenhouse Plants, must be carefully watered this month—give as much air as possible on fine days.

Camellia buds will now be swelling, and the plants should be copiously supplied with water at the roots—syringe them occasionally over their foliage. The seeds should be sown at once.

Azaleas should be sparingly watered, during this, and the ensuing month.

Cactuses will require very little water, until the buds begin to advance, in the spring.

Chrysanthemums in pots, must have plenty of air and water.

Pæonias may still be removed, with success.

Tulips, Hyacinths, Anemones, Crocuses, and other hardy bulbs, may now be planted.

Tuberoses, Amaryllises, and other tender bulbs, if not already taken up, should be attended to immediately.

Dwarf Rocket Larkspur and other hardy annual flower seeds, may still be sown.

Verbenas, Stocks, Carnations, and other half hardy plants, should now be housed.

Mignonette in pots, should have plenty of air.

Dahlias should now be taken up and placed away upon shelves in a dry cellar or under the stage of a green house for the winter.

ON THE CULTIVATION OF BULBOUS ROOTS IN POTS AND GLASSES.

By JAMES HOGG, New York.

As the season for planting bulbous roots in pots and glasses is now approaching, perhaps some hints on their culture in rooms might not be unacceptable, especially to your lady readers.

The bulbs which are most easily and most commonly cultivated in rooms are hyacinths, tulips, narcissuses, jonquils, crocuses, snowdrops, Persian cyclamen, and Winter aconite; to these may be added many species of oxalis, sparaxis, ixia, amaryllis, ixchenalia, and other bulbs; but as these latter are not so generally grown as the first mentioned, and also require a different treatment, I shall not now enter into the details of their cultivation.

When it is desired to grow hyacinths in glasses with water, good sound large roots should be selected; the glasses should be of some dark color, such as blue, purple, or green, or else opaque, as the roots shun light, and, therefore, do not thrive well in clear glasses. The glasses should be filled with rain, or river water, up to the neck, or so far as, that the ring at the bottom of the bulb only should touch the water. They should then be put into a dark, warm closet until the bulb has emitted roots, and the shoot from the crown has grown about half an inch in height; it should then be placed in a shady part of the room for four or five days, but not over a mantel piece, or near a fire, or in a strong draught of air; and afterwards be removed to a window with a sunny exposure, giving air by raising the sash for two or three hours during the middle of the day, when the sun shines. On no account should they be placed outside the window, as the cold harsh winds which prevail at this season effectually check their growth. The water should be changed about once in two or three weeks; the glasses should be turned on one side, and the roots partially withdrawn to let the water flow out freely, as when the roots are wholly withdrawn, it is difficult to replace them without seriously injuring them.

The single hyacinths are generally the best for blooming in water: subjoined is a list of twelve single and twelve double varieties, suitable for this purpose, viz:—

Single Hyacinths.

Amicus, dark blue	Lord Wellington, rose color
L'Ami de Cœur, purple	
Orondatus, porcelain blue	Le Vainqueur, white
Emilius, porcelain blue	Le Candeur, white
Princess Esterhazy, crimson	Pyramide Superbe, white
	Isabella, yellow
Boquet Rouge, crimson	Crœsus, yellow

Double Hyacinths.

L'Amitie, dark blue	Triomphe Blandina, white
Datamus, purple	
Activite, porcelain blue	Sceptre d'Or, white with yellow edge
Bouquet Tendre, red	
Hugo Grotius, rose	Duc de Berri, white with red edge
Groot Voorst, red	
Bijou des Amateurs, white with purple edge	Louis d'Or, yellow
	Duc de Berri d'Or, yellow

When hyacinths are grown in mould, they should be planted in pots containing about a quart (six-

inch.) The soil should be two thirds fresh loam, and one third well rotted horse or cow manure: the latter is preferable when it can be obtained, with enough of coarse sand added to make it feel gritty in the hand. The bulb should be planted so that the soil will cover the crown about half an inch, and under the bulb should be placed, about half an inch in thickness, some coarse sand, as it prevents the water from rotting the young roots. They should be kept in a warm shady place until the shoot appears above the soil; and should be moderately and regularly watered, being careful not to let them get dry, as it checks their growth. After the shoot has appeared, they may be removed to a window exposed to the sun, observing the same directions as to air, &c., as are given concerning those in glasses. In addition to those suitable for glasses, which will also do well in pots, the following varieties may be added, viz:—

Single Hyacinths.	*Double Hyacinths.*
Lord Duncan, porcelain blue	Duc de Normandie, dark blue
Mad'lle de Valliere, purple	A la Mode, porcelain blue
Appius, dark blue	Waterloo, crimson
Mars, red	La Deese, pure white
Blanche Imperial, white	Don Gratuit, white with yellow eye
Fortunatus, white	Passe Virgo, white with purple eye

A very pretty effect is produced by growing hyacinths in moss. For this purpose, an open-worked French basket may be procured, and a lining of moss placed inside; a glass or other dish is also to be placed in it, and this dish is to be filled up with moss in which the bulbs are to be placed; the moss is then to be well moistened with water, and the bulbs treated as directed for those grown in glasses, only that an excess of water is to be avoided, as, if the water covers the bulbs, they will decay. A rather singular effect is also produced by taking a rather large-sized turnip, and scooping it out from the root end, until it is about half an inch in thickness, filling up the body of the turnip with mould, and planting a hyacinth in it, and then suspending the turnip by three ribbons or otherwise. The leaves of the turnip will shoot out and turn upwards, completely hiding the roots, and making a very pretty vegetable flower pot.

Tulips, Narcissuses, Jonquils, Winter Aconite, Snowdrops and Crocuses, require the same treatment and soil as hyacinths; but the sand at the root of the bulb may be omitted. Of Tulips, three may be planted at equal distances from each other in a pot containing about two quarts (seven-inch); Jonquils, from three to five; Snowdrops and Crocuses, five to seven, in the same sized pots. But Narcissuses require more room, and of these but one root should be placed in a six-inch pot. Subjoined is a list of some of the best varieties of the above bulbs; but many varieties, of probably equal merit, may be found in the seed stores, and the same may be said of the Hyacinths:—

TULIPS.

Early Single.	*Early Double.*
Duc Van Thol	Tournsol
Duc d'Holstein	Marriage de Ma Fille
Pottebakker	Le Candeur
Miltiades	Duc Van Thol
Waterloo	Rex Rubrorum
Lac Bon Flos	La Belle Alliance
Parrot Tulips.	
Perfecta	Luteo Major
Rubra Major	Maregrave of Baden

Polyanthus Narcissus.	
Grande Monarque de France	Morgenster
Double Roman	Bouquet Triumphant
Luna	Bazelman Major
Double Narcissus.	
Double White Tratus Cantus	Orange Phœnix

To these may be added *Narcissus bulbicodium*, and *Narcissus poeticus* with its numerous varieties.

Of Jonquils, Snowdrops, and Snowflakes, there are but the single and double varieties of each, and of the Winter Aconite, but the one sort. Of this, but one root should be put into a six-inch pot, and it should then be placed in a sunny exposure.

The Persian Cyclamen and its varieties requires a compost composed of equal parts of fresh loam, leaf mould, or black earth, and well rotted dung, to which should also be added a little sand. The corm, or bulb, should be planted *on* the top of the mould, and not in it: the pot should not be larger than twice the diameter of the bulb; (a good sized root will require a six-inch pot;) after it is planted, it should be kept in a shady, airy situation, with very little water, till the leaves unfold, when it may be removed to a warmer situation, and more abundantly watered.

All bulbs should be but moderately watered until the leaves form, when the quantity may be increased, care being taken that the soil is neither sodden by over-much water, or dry for the lack of it. After the bulb has done blooming, water should be somewhat more sparingly given, and the plant removed to a colder, and more airy situation, until the leaves begin to turn yellow, when the supply of water should be almost entirely withheld; and when the leaves are decayed, the bulb may be taken from the earth, and put by for planting in the following autumn; but hyacinths and tulips, after being grown in pots, are scarcely ever fit to be grown in them two seasons in succession. In the ensuing autumn, they should be planted in the open ground, and, if they show flower, the flower stem should be pinched off; and, properly attended to, they may be fit for room culture in one or two seasons afterwards.

When hyacinths are grown in glasses, and it is desirable to save the root, they should be put into pots with the compost used for those grown in earth, and they should be treated exactly in the same way as those are after they have done blooming.

These remarks are very seasonable and so much in detail, that no one can fail of having good flowers.—*Ed. Hovey's Magazine.*

SUPERIOR MODE OF CURING HAMS.—Agreeable to your request, I herewith send you the process of curing the hams I sent you in March, which recently called forth the admiration of the American Agricultural Association and the Farmers Club at New York.

I made a pickle of two quarts of salt, to which I added one ounce of summer savory, one ditto of sweet marjoram, one ditto allspice, half ditto saltpetre, and one pound brown sugar; boiled the whole together and applied the mixture boiling hot, to one hundred pounds of ham, and kept it in the pickle 3 or 4 weeks.

My process of smoking was not the most expensive, but may not be the less available on that account. I smoked the hams in a seed cask, with one head in, with a small hole for the smoke to pass out, hung my hams to the head, and used about a peck of mahogany saw dust for fuel, which I happened to have on hand for packing goods. I smoked them but one week.—*Am. Agriculturist.*

A WORD OF EXHORTATION TO THE WIFELESS.

"What is there in the vale of life,
Half so delightful as a wife,
When friendship, love, and peace combine
To stamp the marriage bond divine?"—[Cowper.

A wife! earth's ev'ry boon is dross
Without a wife,—all, all is loss.
The farmer's thrift, the merchant's gain,
Ambition's prize,—all, all are vain!
"It is not good," Heaven saw and said,
"That man should be alone,"—and made
"A help meet"—last and loveliest
Of all his terene works—and best,
"Angel enshrined in human mould
"Doubly refined, earth's gems nor gold
"Can reek' thy worth; thou boon divine!
"For thee, them all we would resign."
But utter home—the very sound
A magic influence sheds around,
And long forgotten scenes arise
Most vividly before our eyes.
Cheered by that sound, the wanderer,
Far from the land he loves most dear,
Yields for the hour to fancy's sway,
And borne on speedy wing away,
Directs his visionary flight
Homeward,—with rapturous delight
Greets his fond wife, receives the kiss—
Affection's seal—earth's purest bliss.
But utter home—the exile home,
Though stern of soul, bereft, and lone,
Feels the soft influence at his heart,—
It warms—it melts—the tear drops start—
Roused by a sound of that blest word
Th' indignant soldier draws his sword,
The word—the sound, it has a charm
That fires his soul, and nerves his arm;
Woe to the base invading foe
That meets his eye, and feels his blow!
Whence has this word the mystic power
To move all hearts at ev'ry hour?
Ah! why inquire? All know—all own
Woman hath wrought the spell alone.

A living death is his sad lot
Whose isolated heart knows not—
Hath never known nor wills to prove—
Th' extatic bliss of wedded love:
He wends his dark, cold way alone,
Pitied by all—beloved by none.
"Then first of all to thee be given
"The constant care and love of Heaven,
"To guide and bless thy life!
"And first of earth's best blessings all,
"Be it thy happy lot to call
"Some pure fair spirit—WIFE!"

IMPORTANT TO HOUSEKEEPERS.—A lady in Batavia has discovered a new method of washing clothes which she highly recommends. It is published in the New York Tribune. It is as follows:

WASHING CLOTHES.—Mr. Editor, I have lately found a new way of washing, which I think is a great help, although I never saw it in print. It consists in using turpentine.

My mode of using it, is to take the men's week shirts Sunday evening, * and put them into cold water to soak until morning, when I place them in a chaldron kettle, with good suds, and add the turpentine, and set them a boiling till after breakfast, say one hour. I then take them into a barrel and pound them hard; rub them on a washboard, soap them, and lay them by till their time comes to boil again, and spread them on the grass. I use two table-spoonsful of turpentine to three or four pails of water.

MARY P.

* I think Mary P. might put her clothes to soak on another day.—ED.

CULTIVATION OF THE BEAN.

Loudon gives the following directions for the culture of *runners*, or *pole-beans*, as they are commonly called in this country:—The runner kidney bean may be sown in a small portion towards the end of April, [about the middle of May in New England] if tolerably warm, dry weather; but as these beans are rather more tender than the dwarf sorts, more liable to rot in the ground by wet and cold, especially the scarlets, the beginning or middle of May [first of June in New England] will be time enough to sow a considerable crop; and you may sow a full crop about the beginning of June. Allot principally the scarlet and large white runners. Some Dutch runners are very eligible as a secondary crop. The first crops should have the assistance of a south wall. Intermediate crops may be sown in any open compartment, or against any fence not looking north. The latest sown will continue bearing longer under a good aspect and shelter. In sowing, draw drills about an inch and a half, or not more than two inches deep. Let paralel rows be at least four feet asunder, to admit in the intervals tall sticks or poles for the plants to climb on. Place the beans in the drills four inches apart, and earth them in evenly the depth of the drills. A row contiguous to a fence or building may ascend upon lines. Some may be sown in a single row along a border, or on each side of a walk, and have the support of a slight trellis of laths and lines; or they might be arched over with similar materials to form a shady walk or bower. In a cold, wet season, or when requisite to have a few plants more forward than the general crop, some scarlets may be sown in April, either in a slight hot-bed, or in pots, under frames of hand-glasses, to raise and forward the plants, till two or three inches high: then, at the end of May, transplant them into the open garden. As the plants come up, and advance from three to six inches in growth, hoe some earth to the stems, cutting down all weeds. When they begin to send forth runners, place suitable supports to each row;—and conduct the tendrils to the sticks or lines, turning them in a contrary direction to the sun. The ascending plants will soon come into flower, podding at the joints, in long succession. They are so prolific, that the returns from three sowings, in May, June and July, will last from July till October.

Taking the crop.—Gather the pods, both from dwarfs and runners, while they are young, fleshy, brittle, and tender, for then they are in the highest perfection for the table; and the plants will bear more fully, and last longer in fruit, under a course of clean gathering, not leaving any superabundant pods to grow old.

To save Seed.—Either sow a portion for that object, or leave rows wholly ungathered of the main crop, or preserve a sufficiency of good pods promiscuously. The beans saved should be the first fruits of a crop sown at a period which throws the entire course of growth into the finest part of summer. Let them hang on the stalks till they ripen fully, in August and September; then let the haum be pulled up and placed in the sun, to dry and harden the seed, which should be afterwards cleared out of the husks, bagged up, and housed.

The pea, English bean, and kidney bean, are liable to the attacks of various insects, especially the *aphides*, [plant lice,] in dry seasons. When early crops are newly sown or planted, mice will burrow for and eat the seed, and when it begins to penetrate the soil, it is attacked by snails, slugs, the cut-worm, &c. The usual means of guarding against the ravages of insects must, therefore, be resorted to by the gardener.

As regards the field culture of the bean, we would

observe, that the white kind, which is most generally approved of in New England, will produce pretty good crops on poor, sandy, or gravelly soils; but, when planted on such ground, it is good husbandry to wet and roll them in plaster before planting. They may be planted in hills or drills, the rows two and a half or three feet apart, according to the strength of the soil, and cultivated like other hoed crops. They may be planted the latter end of May, or beginning of June, or about the time of planting Indian corn. If planted in hills, they may be placed from fourteen to twenty-four inches apart in the rows, and the rows the distance before mentioned. Five beans are quite enough to remain in a hill. Hogs' dung, mixed with ashes, is said to be the best manure for them; and it is said to be very injurious to beans to hoe them while the dew is on, or in wet weather.

Judge Buel, of Albany, has given the following notices of some experiments in the field culture of this vegetable:

"Beans may be cultivated in drills or in hills. They are a valuable crop: and, with good care, are as profitable as a wheat crop. They leave the soil in good tilth. The China bean, with a red eye, is to be preferred. They ripen early, and are very productive. I cultivated beans the last year in three different ways, viz.: in hills, in drills, and sowed broad-cast. I need not describe the first, which is a well known process.—I had an acre in drills, which was the best crop I ever saw. My management was this: on an acre of light ground, where the clover had been frozen out the preceding winter, I spread eight loads of long manure, and immediately ploughed and harrowed the ground. Drills or furrows were then made with a light plough, at the distance of two and a half feet, and the beans thrown along the furrows, about the 25th of May, by the hand, at the rate of at least a bushel on the acre. I then guaged a double mould-board plough, which was passed once between the rows, and was followed by a light one-horse roller, which flattened the ridges. The crop was twice cleaned of weeds, by the hoe, but not earthed. The product was more than forty-eight bushels, by actual measurement. The beans brought me one dollar the bushel last fall. The third experiment was likewise upon a piece of ground where the clover had been killed. It was ploughed about the first of June, the seed sowed like peas, upon the first furrow, and harrowed in. The drought kept them back; but about sixty-five rods of ground, on which the experiment was made, gave a product of twelve and a half bushels. The crop was too ripe when it was harvested, and as it was cut with a scythe, I estimated that about two and a half bushels were left upon the ground. No labor was bestowed upon them from the time they were sown till they were harvested."

CULTIVATION OF THE PEA.

The pea is a hardy annual, a native of the south of Europe, cultivated in Great Britain from time immemorial, and in this country from its first settlement.

Times of Sowing.—"The dwarfs are generally employed in hot-bed culture, which, however, succeeds badly, and is neither worth preserving nor describing, and the less so as early crops may be more certainly had by sowing in the fall, in sheltered situations, and covering during the winter with a layer of leaves, and another of long stable-litter, loosely applied, to keep the leaves in their places. After the earth takes a temperature favorable to vegetation, your pea sowings should be made once a fortnight to keep up a regular and successive supply."—*Armstrong.*

Quantity of Seed.—"Of the small, early kinds, one pint will sow a row of twenty yards; for the larger sorts, for main crops, the same measure will sow a row of thirty-three yards."

Process in Sowing.—"For early sorts, make the drills one inch and a half deep; and let parallel drills be two feet and a half, three, or four feet asunder. Peas that are to grow without sticks require the least room. For summer crops and large sorts, make the drills two inches deep, and four, five, or six feet asunder. As to the distances along the drill, distribute the peas according to their size and the season: the frame, three in the space of an inch; the Charltons, Hotspur, and dwarf marrowfat, two in an inch; the Prussian blue and middle-sized sorts, three in two inches; the large marrowfat and Knight's, a full inch apart; the moratto, rouncivals, and most larger sorts, an inch and a half apart; and the Patagonian, two inches."

Soil and Situation.—"The soil should be moderately rich, and the deeper and stronger for the lofty growers. Peas are not assisted, but hurt, by unreduced dung recently turned in. A fresh, sandy loam, or road-stuff, and a little decomposed vegetable matter, is the best manure. The soil for the early crops should be very dry, and rendered so, where the ground is moist, by mixing sand with the earth of the drills."—*Loudon.*

Armstrong says, "A loose and warm soil is most favorable to this vegetable, which, by the way, is neither improved in quality nor quantity by stable manure. The soil of Clichy, and of Point de Jour des Columbe, &c., in the neighborhood of Paris, is a pure sand, principally devoted to pea crops, and yielding these most abundantly without the application of dung new or old."

Subsequent Culture.—"As the plants rise from half an inch high to two or three inches, begin to draw earth to the stems, doing this when the ground is in a dry state, and earthing gradually higher as the stems ascend. At the same time, with the hoe, loosen the ground between the young plants, and cut down rising weeds. Early crops should be protected during hard frosts by dry straw or other light litter, laid upon sticks or brushwood; but remove the covering as soon as the weather turns mild. If, in April, May, and the course of the summer, dry weather occurs, watering will be necessary, especially to plants in blossom and swelling the fruit; and this trouble will be repaid in the produce. Rows partly cut off may be made up by transplanting. In dry weather, water, and in hot weather, shade, until the plants strike. All peas fruit better for sticking, and continue longer productive, especially the larger sorts. Stick the plants when from six to twelve inches high, as soon as they begin to vine. Provide branchy sticks of such a height as the sort will require; for the frame and Leadman's dwarf, three feet high; for the Carlton and middle-sized, four or five feet; for the marrowfat and larger kinds, six or eight feet; for the rouncival, and for Knight's marrow-pea, nine or ten feet. Place a row of sticks to each line of peas, on the most sunny side, east or south, that the attraction of the sun may incline the plants towards the sticks. Place about half the number on the opposite side, and let both rows stand rather wider at top than at the ground. Some gardeners stop the leading shoot of the most early crop

when in blossom; a device which accelerates the setting and maturity of the fruit.

To forward an early Crop.—"Sow or plant in lines from east to west, and stick a row of spruce-fir (or other evergreen) branches along the north side of every row, and sloping so as to bend over the plants, at one foot or eighteen inches from the ground. As the plants advance in height, vary the position of the branches, so as they may always protect them from perpendicular cold or rain, and yet leave them open to the full influence of the spring sun. Some cover during nights and in severe weather with two boards, nailed together lengthwise, at right angles, which forms a very secure and easily-managed covering, but excludes light. A better plan would be to glaze one of the sides, to be kept to the south, and to manage such row-glasses, as they might be called, when over peas, beans, spinage, &c., as hand-glasses are managed when over cauliflower; that is, to take them off in fine weather, or raise them constantly or occasionally by brickbats, or other props, as the weather and the state of the crop might require."—*Loudon.*

Management of a late Crop.—The best variety for this purpose is Knight's marrow-pea, which may be sown at intervals of ten days from the beginning to the end of June. "The ground is dug over in the usual way, and the spaces to be occupied by the future rows of peas are well soaked with water. The mould upon each side is then collected so as to form ridges seven or eight inches above the previous level of the ground, and these ridges are well watered. The seeds are now sown in single rows, along the tops of the ridges. The plants grow vigorously, owing to the depth of soil and abundant moisture. If dry weather at any time set in, water is applied profusely once a week. In this way, the plants continue green and vigorous, resisting mildew, and yielding fruit till subdued by frost."—*Hort. Trans.* vol. ii

To save Seed.—"Like other vegetables, the pea is susceptible of considerable improvement, and by the simple means of marking the finest plants of each variety, and keeping them for seed. Wilson's frame and the Knight pea have been formed in this way, and afford sufficient proof of the wonders produced by a very small degree of observation and care."—*Armstrong.*

Field-culture of the Pea.—The most common mode of sowing peas is broad-cast; but the advantages of the row culture, in a crop so early committed to the ground, must be obvious.—Loudon says, "In Kent, where immense quantities of peas are raised, both for gathering green and for selling ripe to the seedsmen, they are generally sown in rows from eighteen inches to three feet asunder, according to the kind, and well cultivated between. Peas laid a foot below the surface will vegetate; but the most approved depth is six inches in light soil, and four inches in clay soil; for which reason they ought to be sown under furrow when the ploughing is delayed till spring. Of all grain, beans excepted, they are in the least danger of being buried too deep."—*Loudon.*

Deane observed, that "for field peas, land that is newly ploughed out of sward is generally accounted best; and land which is high and dry, and has been not much dunged. A light, loamy soil is most suitable for them; and if it abound with slaty stones, it is the better. But they will do in any dry soil. The manures that suit peas best are marl and lime. Our farmers do not commonly allow a sufficient quantity of seed for peas, in broad-cast sowing. When peas are sowed thin, the plants will lie on the ground, and perhaps rot; when they are thick, the plants will hold each other up with their tendrils, forming a continued web, and will have more benefit of the air."

Insects and Diseases.—The Massachusetts Agricultural Repository, for June, 1822, contains some remarks of the Hon. T. Pickering, relative to a bug or fly, which preys on the pea, in which he observes, that an effectual remedy for this evil is *late* sowing; but the hot sun of June will so pinch the vines of the late sown peas, that the crop will be small, unless the land be moist as well as rich. He then details some experiments, by which he concludes that this insect is limited to a certain period for depositing its eggs; and if the tender pods are not found till that period has passed, the peas will be free from bugs.—Colonel Worthington, of Rensselaer county, New York, "sowed his peas on the 10th of June, six years in succession, and a bug has never been seen in his peas; whereas his neighbors, who have not adopted this practice, have scarcely a pea without a bug in it. He supposes the season for depositing the egg of the pea-bug is passed before the peas are in flower."—*Memoirs of New York Board of Agriculture*, vol. ii. p. 23. "The only insect that commonly injures our peas is a small brown bug or fly, the egg [or larva] of which is deposited in them when they are young, and the pods easily perforated. The insect does not come out of its nest till he is furnished with short wings. They diminish the peas in which they lodge nearly one-half, and their leavings are fit only for the food of swine. The bugs, however, will be all gone if you keep them to the following autumn. But they who eat buggy peas the winter after they are raised, must run the venture of eating the insects."—*Deane's New England Farmer.*

The same writer recommends, when seed peas are known or suspected to contain insects, to scald them a quarter of a minute in boiling water, spread them about, and sow them without delay. If any of the bugs should be in the peas, this scalding will destroy them; and the peas instead of being hurt, will come up the sooner, and grow the faster.

Mildew is another evil attending peas, especially such as are sown late in the season. This disorder is supposed by Knight to be caused by "a want of a sufficient supply of moisture from the soil, with excess of humidity in the air, particularly if the plants be exposed to a temperature below that to which they have been accustomed." The remedy which he recommends is, to "give water rather profusely once a week, or nine days, even if the weather proves showery."

Use.—The use of peas for soups and other culinary purposes is well known. They are likewise very serviceable in fattening hogs, for which purpose they should be harvested dry, and ground into meal. If the straw be forward in autumn, and has been harvested without injury, it will be little inferior to ordinary hay for feeding cattle.

"In boiling split peas, some samples, without reference to variety, fall or moulder down freely into pulp, while others continue to maintain their form. The former are called *boilers.* This property of boiling depends on the soil: stiff land, or sandy land that has been limed or marled, uniformly produces peas that will not melt in boiling, no matter what the variety may be."—*Loudon.*

"When peas are sown before winter, or early in spring, they are very apt to be eaten by mice. To prevent this, soak the peas for a day or two in train oil before you sow them, which will encourage their vegetation, and render them so obnoxious to the mice that they will not eat them."—*Domestic Eng-*

From Fessenden's Complete Farmer.

CULTIVATION AND CURING OF HOPS.

The following was written by William Blanchard, Jun. Esq, and first published in the New England Farmer, several years ago:

The hop is a native plant. It is found growing spontaneously on the banks and intervals of many of our large rivers. There are several distinct species, all bearing a near affinity to each other; (I have noticed five.) At present they are cultivated together, promiscuously; no preference having been given to any particular one of them by the brewer. But I am of the opinion that there is an essential difference in their qualities; that one may be the best for pale ale, another for strong beer, and a third for porter;—and I presume, ere long, particular attention will be paid to ascertain their different qualities.

The soil best calculated for the production of hops I consider to be a sandy loam, rather low and moist. I am led to this conclusion partly from my own observation, and farther (considering nature an infallible instructor) from finding the lands which produce them naturally (intervals and the banks of large rivers) to be of this kind. Yet, I must observe, I have seen very fine crops raised on very different soils.

I should recommend the following mode of preparing the land and managing the crop. In the fall (October) plough the land deep, nine or ten inches. In the spring following, pass a heavy, sharp iron-toothed harrow over the land in the same direction it was ploughed; after which, spread your manure evenly over the same, sixteen cords per acre, and more if the land be much reduced; then cross-plough the land nearly the same depth, and furrow it as for planting corn, the furrows to be at least four feet apart.

It is customary to plant corn or potatoes with the hops; (I should prefer potatoes.) Plant every other hill in every other row with hops, thus placing the hop hills at least eight feet apart.—Put four cuttings from the running roots, about eight inches in length, into each hill, and cover them the common depth of potatoes.

Many yards have been much injured by being planted too closely. It is of great importance to have the hills so far distant from each other as to admit a free current of air to pass through the yard.

All the attention requisite the first season after the hops are planted, is to keep them clean from weeds, which is easily done when hoeing the crop planted amongst them. In the fall (October,) to prevent their being injured by the hard frosts of winter, carry on and lay out of your cart one shovelful of com. post manure on the top of each hill; manure from the hog-sty I should prefer.

In each following spring, before the hops are opened, as it is termed, spread evenly over the yard about eight cords of manure per acre, (coarse strawy manure I should prefer, as it will have a tendency to keep the land loose,) and plough the field both ways at the first hoeing. They require but three hoeings in a season, unless necessary to subdue the weeds; the last of which should be performed when the hops are in full blossom, (about the beginning of August.)

After the first crop, it is necessary to open the hops, every spring, by the middle of May;—which is performed by making four furrows between the rows, turning the furrows from the hills, and running the plough as near to the same as possible without injuring the main roots.—Then the earth is removed from the roots with a hoe, all the running roots cut in, with a sharp knife, within two inches of the main roots; the tops of the main roots must also be cut in, and then the hills covered with earth about two inches deep.

The next thing necessary to be done is to set the poles. This should be done as soon as the hop-vines begin to make their appearance. By so doing, much time and labor will be saved in tying up the vines to the poles, as many of the vines will naturally take to the poles. There should not be to exceed two vines to one pole, nor to exceed two poles to one hill, nor any pole to exceed sixteen feet in height. Many yards have been very much injured by letting a greater number of vines grow on one pole, and almost destroyed by over-poling

Very much depends on paying due attention, in the spring, to select the most thrifty vines, and training them to the poles, which is done by fastening them to the poles with a piece of yarn, slightly twisted together with the thumb and finger.

It will be necessary to inspect your hop-yard frequently, until the hops begin to blossom, and "tie up the vines," as it is termed, as they are subject to be blown off the poles by every high wind.

As soon as the hops are ripe, which is about the beginning of September, they must be immediately gathered, or the crop is lost. The quality of the hops depends considerably on their being picked clean from leaves and stems. The labor of picking or gathering the hops may be well performed by women and children, having one man to a bin to handle the poles and to inspect the pickers. The bin is a wooden box, about nine feet long, three feet wide, and two and a half high, made of thin pine boards, that it may be easily moved over the yard, across which the poles are laid, and into which the hops are picked by hand. Care should be taken, when gathering the hops, to cut the vines two feet from the ground, that the roots may not be injured by bleeding.

The most important part in the management of hops is the curing or drying of them. Here I would note that hops always grow first sort, and that all second sort and refuse hops are made so by unfortunate or unskilful management.

Much depends on having a well constructed kiln. For the convenience of putting the hops on the kiln, the side of a hill is generally chosen for its situation. Care should be taken that it be a dry situation. The kiln should be dug out the same bigness at the bottom as at the top; the side walls laid up perpendicularly, and filled in solid with stone, to give it a tunnel form.—Twelve feet square at the top, two feet square at the bottom, and at least eight feet deep, is deemed a convenient size. On the top of the walls sills are laid, having joists let into them in like manner as for laying a floor; on which laths, about one and a half inches wide, are nailed, leaving open spaces between them three-fourths of an inch, over which a thin linen cloth is spread and nailed at the edges to the sills. A board about twelve inches wide is set up on each side of the kiln, on the inner edge of the sill, to form a bin to receive the hops. The larger the stones made use of in the construction of the kiln, the better; as it will give a more steady and dense heat. The inside of the kiln should be well plastered with mortar, to make it completely air tight. Charcoal (that made from yellow birch or maple I should prefer) is the only fuel proper to be used in drying hops. The kiln should be well heated before any hops are put on, and carefully attended to keep a steady and regular heat.

Fifty pounds of hops, when dried, is the largest

quantity that should be dried at one time, on a kiln, of this size; and unless absolutely necessary to put on that quantity, a less would dry better. The green hops should be spread as evenly and as light as possible over the kiln.—The fire at first should be moderate, but it may be increased as the hops dry and the steam is evaporated.

Hops should not remain long in the bin or bag after they are picked, as they will very soon heat and become insipid. The hops should *not* be stirred on the kiln until they are completely and fully dried. Then they should be removed from the kiln into a dry room and laid in a heap, and there remain, unmoved and unstirred, until bagged, which is done with a screw having a box made of plank, the size the bag is wished, into which the cloth is laid, and the hops screwed into the box, which is so constructed that the sides may be removed, and the bag sewed together while in the press.

The hops, after laying a few days, will gather a partial moisture, called a sweat. The sweat will probably begin to subside in about eight days, at which time, and before the sweat is off, they ought to be bagged in clear dry weather —As the exact time when the hops will begin to sweat, and when the sweat will begin to subside or dry off, (the proper time to bag them,) will vary with the state of the atmosphere, it will be necessary to examine the hops from day to day, which is easily done by taking some of them from the centre of the heap with your hand. If on examination you find the hops to be very damp, and their color altering, which will be the case if they were not completely dried on the kiln, and not otherwise, you must overhaul them and dry them in the air.

The most convenient size for a bag of hops to handle and transport, is about five feet in length, and to contain about two hundred and fifty pounds. The best bagging is coarse and strong tow cloth of our domestic manufacturing; next to that, Russia hemp bagging. The East India sugar and gunny bags, so called, ought never to be used. The sugar bags are of an unreasonable weight, and both they and the gunny bags are of no value to the brewer; whereas the other bags are worth prime cost.

It is now common for those who have entered considerably into the cultivation of hops, to build houses over their kilns, which, in wet weather, are very convenient; otherwise, a kiln in the open air would, in my opinion, be preferable. It is necessary to have these buildings well ventilated with doors and windows; and to have them kept open night and day, except in wet weather, and then shut those only which are necessary to keep out the rain. If a ventilator was put in the roof of the building, directly over the centre of the kiln, about six feet square, built like those in breweries and distilleries, I am of opinion they would be found very advantageous. I have seen many lots of hops much injured both in color and flavor by being dried in close buildings.

Where the houses over the kilns are built large, for the purpose of storing the hops as they are dried, which is a great saving of labor, a close partition should be made between the kilns and the room in which the hops are stored, to prevent the damp steam from the kilns coming to them, as it will color them, and injure their flavor and quality very much.

I expect that many of our farmers will object to the mode of manuring hops which I have recommended, their common practice being to put the manure in the hills when they plant the hops, and afterwards to apply the manure on the hills at the first and second hoeings. I find the hop-roots are very liable to be injured by the worms, and to decay. My opinion is, that the manure in the hill has a tendency to produce the worms, and its fermentation at their roots to cause their decay; and that the crop is not more, if as abundant, as when manured in the manner I have recommended: and, farther, that a hop-yard manured in this manner will continue in a healthy state for many years.

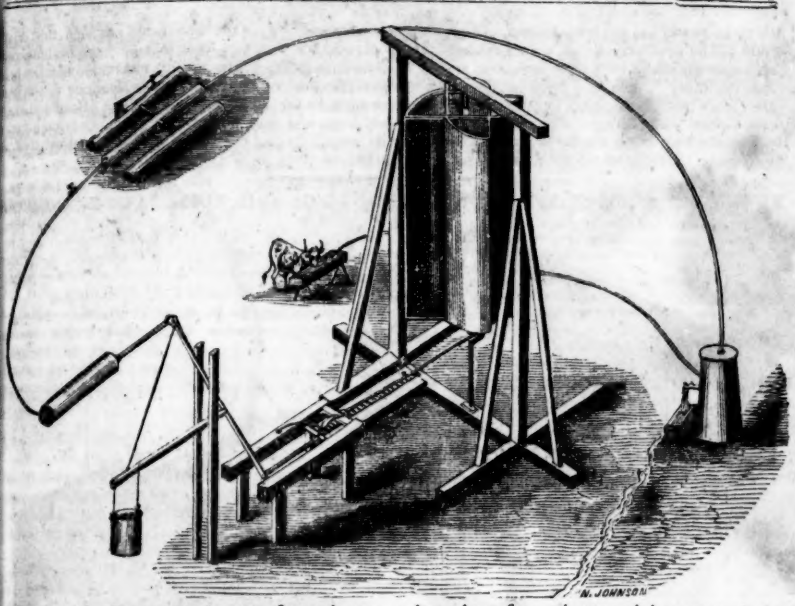
I also expect the quantity of manure I have recommended will be objected to by many, it being the common received opinion, that hops should have little or no manure. I find it a general complaint amongst the farmers where hops have been cultivated many years, that the quantity raised per acre does not exceed the one-half raised by their ancestors on the same land; inferring that the "hops are running out," as it is termed, and cannot now be cultivated to advantage. Hops, I believe, in common with all sorts of grain and vegetables, flourish best and produce the finest crops when cultivated on new land, which require little or no manure; and such were the lands which their ancestors cultivated. The same complaint I presume would be made against all sorts of grain and vegetables, if raised with little or no manure, on lands that have long been cultivated.

From my own observations, I am confident that no crop can be more improved and increased by high cultivation than hops.

REMINGTON'S PNEUMATIC WATER RAISER AND FIRE ENGINE.

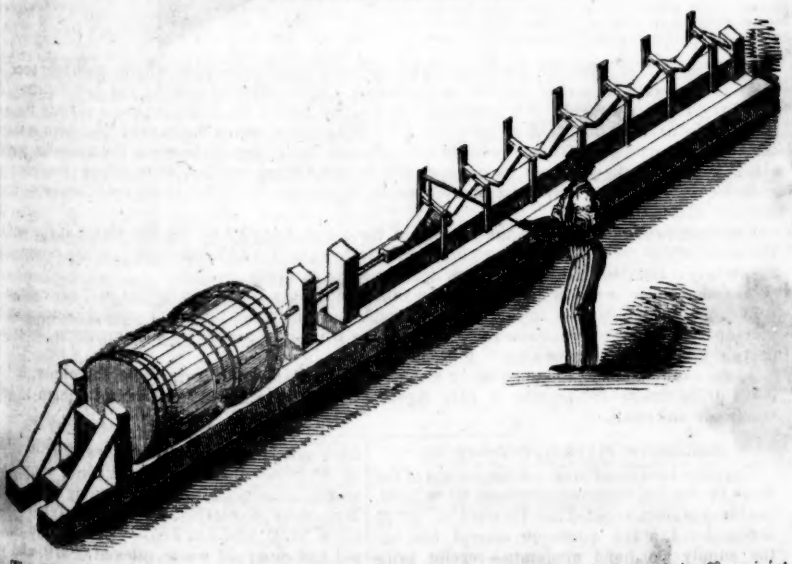
This invention is simple and important in its results. Its great peculiarity consists in employing a very frail power for a long time, that it may be used very efficiently for a short time. It will be seen from the annexed cut that a small vertical wind mill 5 feet high and 2 in diameter, with a crank near the bottom, attached to a slide which has a pall working into a ratchet. At each revolution the ratchet is pushed forward one notch, the mill continues to revolve, pushing forward the rachet a notch at a time, until the slide or rachet is entirely out, when two small projections on the slide itself, raises the palls and allows the weight to push the ratchet back to its original place, and driving in the piston of the pump at the same time, thereby concentrating in one stroke the power of any number of revolutions that may be desired or necessary to force in the piston of the pump against the elasticity of the air that may be at the time in the magazine.

By this process a magazine of great force is kept constantly on hand, sufficient to raise water for stock, and all other purposes. And by passing a small pipe from the magazine down into a vessel placed in well or creek, at no matter what depth or what distance, and a return pipe to the point where the water is required to be discharged, and by turning a stop, the water will flow rapidly, and if a pipe similar to that of a fire engine be applied to the orifice, many thousand



gallons may be thrown on the top of any house or barn in a few minutes, giving protection to country houses never before attained, requiring no attention, and without a dollar's expense. Arrangements are now making in this city for the manufacture of these machines. The entire cost will be $125.

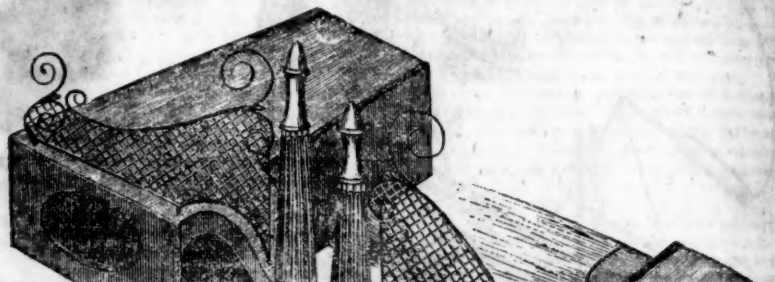
REMINGTON'S TOBACCO PRESS.



The simplicity of this Press certainly has no parallel. It is built on the principle of the Knee-joint,

which no power has yet been known to equal. But the difficulty with the knee-joint has been this: that it could not be operated except with a ratchet or notches, and for the knee-joint to have considerable power the notches must be very close together, and no material has sufficient strength to sustain the notches being close together. The above press obviates all the objections, and combines all the perfections of the knee-joint, there being no notches to break, but pressing straight on the ends of timber. The above cut represents a press 24 feet long. They will be made 12 feet long, and may be carried conveniently on a cart or wagon, and warranted second to no press in power; its simplicity and cheapness will be manifest from the above cut. Arrangements are now being made to introduce them in this state.

REMINGTON'S HOT BLAST, SMOKE PREVENTING, AND FUEL SAVING ANDIRONS.



Involved in this invention are to be found the very same prinicples which produce such extraordinary results in saving fuel and in producing a more efficient heat by the application of the Hot Blast in Furnaces. It is a fact known to all, that heated air will rise, consequently the cold air must be near the floor, and as the sides of the fire-place prevents the rays of heat from reaching the corners on either side, a body of cold air is constantly passing up between the andirons and the side walls, without giving out its oxygen, and without being rarified, thus filling the chimney with a column of cold air, the consequence is, its descent into the room, and hence so many smokey chimneys.

The above andirons prevent the passage of the air in that part of the fire-place, at the ends of the wood where there is generally no fire, partially heating it, and conducting it to the centre of the fire, where it fans the flame, and passes heated up the chimney.

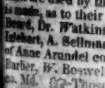
These andirons are as convenient as any others, and only require to be put in the fire place to prevent *any chimney* from smoking. It is confidently believed that they will produce a more pleasant heat with one-third less fuel, and they are warranted under all circumstances, forever to prevent chimneys from smoking.

These andirons are now gotten up in elegant style by SAMSON CARISS, (late T. Palmer, & Co.) No. 140 Baltimore Street, who is sole Agent for Baltimore, and will furnish them to order wholesale and retail.

Baltimore Market, October 29.

Coupons 75a76;—Flour, on the receipt of the news by the last steamer advanced 50 to 75cts. per bbl. but since receded for Howard st. $5.25 is considered a fair quotation; receipt fair, but the supply on hand moderate—receipt price $5.12½; City Mills, supply limited, old $5.25, fresh ground $5.37, which is generally considered the fairest price—Susquehanna, supply also small, sales $5.25a5.37, according to brand—Rye, none in market, it is worth $4 per bbl.—Corn Meal, $3.75 to 3.87—Corn, supply fair, old and new; old white, sales at 68a70, and yellow 62a75c.; new yellow 55a58, and white

A. and in request—Wheat, supply large, prices fluctuating we quote prices to day at 95a105c.—for good to prime reds; and ord. to good at 85a95c. with considdrable sales—while wheat is worth 105a110c. and strictly prime for family flour 118a120c.—Rye, 66a67c. sales; Pa. is worth a few cents more—Oats, have ranged at 25a30c—Flaxseed, 120c. per bushel—Clover seed, good to prime $4a4 50—Timothy, 2.25a2.75, according to quality—Beans, sales at $1.12 small receipt—Peas, receipts light, demand active and prices tending up, about 1000 bushels from Va. and N. C. sold at 80a85—Bacon, sides 4a5 5 8., shoulders 4¢, hams, 6a8c. according to quality—Cattle, 1400 head offered on Monday, at which 1165 head were purchased by packers and butchers at prices ranging from $1.50 to $2.50 per 100 lbs. on the hoof, equal to $3a4.75 nett, averaging about $2.12½ the residue remain unsold; prices were a shade lewer than last week—Hogs, fair supply of live, sales at $4 $4 per 100 lbs—Beef, little doing, no western in first brands—Pork, dull, sales of Mess small at $10¼, on time, prime 9½a9¾—Lard, in kegs, 7¼a8, in bbls. 7a7¼c. sales small—Butter in kegs, 8a10c. not much receiving from the West—Fish, Herrings 4.50; shad 5.50a5.75; No. 1 mackerel 9.50a10; No. 2, $6.50; No. 3, 4.50a5—Apples, $1.50 to 2.50—Cotton is firm at advanced prices, and but little receiving—Coffee, Rio, 7¼a7¾c—Cheese, Eastern in boxes, 9a10, West. Reserve 7a7¼—Wood, hickory $5a5¼, oak 4a4¼, pine $2.75a$3¼—Coal 5a6 per ton—Feathers, 28a30, for prime, sales light; com. to fair 23a28 Hay, $10a12 for best timothy—Hops, 12½a14c. per lb.—Hemp, dew rot, 4c.; manilla 6¾a7; Russia $120 per ton—Molasses, N. O. in bbls. 30a32, stock light—Spirits Turpentine, 52c. per gall.—Tar, 1.75a2.12½ per bbl.—Oil, sperm, winter, 105, fall 100, whale 38a40; linseed 63c. Plaster $2.75 per ton—Potatoes, Maine mercers, 70a75, 75a80c. per bushel; sweet 45a50—Rice, 4.50 per 100 lbs.—Sugars, N. O. 7.50a8.50—Wool, in demand, 60,000 lbs. have been sold last week, at 15c. for unwashed, 20a24 for com. and tub washed, 24a30 for half to full blood—Whiskey 23¢ for hhds. and 24½c. for bbls—Tobacco, market dull, Md. $1.50 to $2 for infer. and common; good 4a6, fine and better qualities 6a 10; Ohio com. to mid. 150a250; good 4a6, fine reds 5a7, fine yellow 5a10, extra kinds 10a12—The inspections for the last 5 weeks:—Md. 4728 hhds.; Ohio, 4790; Missouri, 88; Pa. 2; Ky. 30—Total 9638 hhds.



PLOUGHS! PLOUGHS!!

The subscriber is manufacturing Ploughs of various patterns and of different sizes; also Wheat Fans, Cylindrical Straw Cutters, Corn and Tobacco Cultivators, CORN SHELLERS, &c. Also,

THRESHING MACHINES and HORSE POWERS—these latter are used by the following gentlemen, to whom reference is made, as to their superior value, viz. Messrs. S. Beard, T. Beard, Dr. Watkins, T. J. Hodges, T. Welsh, W. Mackall, J. Tolchart, A. Sellman, W. Hopkins, J. Kent, G. R. Gaither, all of Anne Arundel county; and to Messrs. R. B. Chew, J. Y. Barber, W. Boswell, G. W. Weems, and Z. Howes, of Calvert co. Md. ☞Those wishing to examine the above articles are invited to call at my establishment in *Gilligham alley*, entrance from Howard st. 4 doors from Pratt st. Baltimore.

1ah CHAS. H. DRURY.

NOTICE.

CLAIRMONT NURSERY,

Near Baltimore, Md.

We again take pleasure in notifying our various customers and the public, that the time has nearly arrived for transplanting Trees, &c., and consider our stock of fruit trees superior to what they have ever been before both in quality and in quantity, as we have had an opportuny of testing their correctness from our standard Trees which are extensively bearing.—We deem it unnecessary to enumerate the various kinds of fruit and ornamental Trees, Shrubbery, Roses, Green House plants, Flower roots, &c. &c., suffice it to say our Nursery and Seed Garden occupies about 100 acres of the Farm, and our determination is to give satisfaction if possible, both in price and quality—printed Catalogues, giving our prices, will be be sent gratis; where large quantities are wanted considerable discount will be made. Letters addressed to R. Sinclair, Jr. & Co., Light St., Baltimore, or the subscribers, Balto. Md. will meet with prompt attention.

Persons wishing to act as Agents will please let us hear from them. Oct 1 SINCLAIR & CORSE.

"Spade labour, the perfection of good husbandry."

PULVERIZATION.

DECOMPOSITION.

THE "PREMIUM PLOUGH"—In Prouty & Mears' No. 5 1-2, "confessedly the best PLOUGH known in this country for beauty of work and pulverizing the soil," we have combined the most perfect swing as well as wheel Plough, connected also with the principles of self-sharpening and centre-draught, which with the facility of turning it into a Tandem 2, 4, or 3 horses abreast Plough in a minute of time, renders it the NE PLUS ULTRA of perfection. During the past season it received the first premium for the BEST PLOUGH, at Philadelphia; a first, second and third premium at New Castle county, Del.; the Imperial Medal of Russia, of massive gold, value $300; and at Prince George's society, Md. the highest testimony of approbation, in not permitting it to compete, having already received the first premium as "the *BEST PLOUGH* for general purposes." Their one-horse Plough No. 2 1-2, is strongly recommended for light soils and horticultural purposes, being built after the same model, self sharpening, and carrying a sod furrow 10 in wide with great ease and precision.

For sale at No. 55 LIGHT ST. Baltimore, MR. EZRA WHITMAN being appointed sole Agent for sales in Baltimore and vicinity. Fe 1

EZRA *WHITMAN'S WROUGHT* IRON RAIL-WAY Horse Power and Thrashing Machine, of which more than one thousand are now in use—and as this is the only Horse Power or Thrashing Machine that has given general satisfaction, I take pleasure in giving a short description of it, with a list of prices.

1st. The frame of the Horse Power is made with five posts, on either side, and as many cross girths bolted together with *wrought* iron in the most substantial manner.

2d. The Rail-way, guides, circles, and all the connecting and fastening irons, are made of *wrought iron*, instead of cast iron.

3d, The gearing is at the end of the Power, where it is not affected by the wear, or liable to be broken by wild or false horses.

4th. It being made of wrought iron, there is no difficulty in giving sufficient width for the horses to travel with ease, and no more rods, wheels or fastenings in the *two horse* power, than in the one horse power.

☞Farmers wishing to purchase, will be particular to observe the above, as the great success of my machine, may bring others, of inferior construction, into our market.

I have the pleasure of referring to either of the following named gentlemen farmers, residing in the immediate vicinity of Baltimore, who have purchased my Horse Power and Thrashing Machine the past season, and who will no doubt be willing to give information respecting their utility,—viz:

Jesse Slingluff	James Swan	George Harryman
Jacob. Forney	William Gent	Daniel Bowly
Thomas J. Talbott	Owen Cecil	A. M. Johnson
Joseph Parks	George Jenkins	Charles R. Barney
Frederick Harrison	John Rider	Samuel Hutton

The cash prices for those articles are as follows, viz:

For Two Horse Power, $100—For One Horse Power, $75—with an additional charge for extra long shaft and extra pully, $5. For Thrasher which thrashes and cleans at one and the same operation, $100. For 24 inch Thrasher, with new improvement, $50—20 inch do. with do., $45—16 inch do., $40.

The prices of common Thrashers vary from 25 to $35.

EZRA WHITMAN, Jr.

April 1 No. 55 Light street near Pratt.

FARM MANAGER.—Wanted a situation as manager or agent on a large farm or estate by a farmer who has been educated on the border counties of England and Scotland, and upwards of three years in this country. Apply to

S. SANDS Office of the American Farmer.

AYRSHIRE BULL FOR SALE—He is about 6 years old, of the stock imported by Dr. Hoffman, and is in excellent order—Price $100—Address B. C. HOWARD,
nov 1 Baltimore.

AGENCY FOR THE PURCHASE AND SALE OF IMPROVED BREEDS OF CATTLE AND SHEEP.—The subscriber takes this method of informing his friends and the public, that he will attend to the purchase and sale of the improved breeds of cattle, sheep, swine, poultry, &c., for a reasonable commission. All letters post paid, addressed to him at Philadelphia, will be attended to without delay.
Nov. 1 AARON CLEMENT.

MULES FOR SALE—A pair of well broke Mules for sale —Apply at this office. nov 1

ROSENDALE CEMENT.—The undersigned, offer for sale this superior Cement. And are in possession of certificates from the most celebrated engineers in the United States, as to the superiority of this, over any other now manufactured, and with confidence offer it to those who may require it. GUEST & GILMOR,
Sole Agents for this city, No. 2 O'Donnell's Wharf.
Nov. 1.

TO FARMERS & GARDENERS—The subscriber has always on hand a fine assortment of GLASS for GREEN HOUSES, HOT-BEDS, &c. of all sizes and qualities, which will be sold at lowest market rates. W. A. WISONG,
nov 1 No. 2 N. Liberty st. Baltimore.

SITUATION WANTED AS GARDENER, by a man who is well qualified for the duties thereof—Apply at this office.
nov 1 1t

THE SUBSCRIBER takes pleasure in returning thanks to the many gentlemen who have favoured him with their MILL-WORK; also to the farmers and planters for their liberal support in the Machine line, and would respectfully inform them, that his endeavors to please will continue unremitting. He is prepared at all times to build any of the following kinds of MILLS. Overshot, Pitch Back, Breast, Undershot, Reacting, Steam, Wind, Tide, Horse-power, or Tread Mills; and having the best of workmen employed at pattern and machine making, he can at all times furnish the best articles at the lowest prices, such as Horsepowers, Pettigrew Shellers, Murray's Shellers, 4 kinds hand and power Shellers, portable Mills adapted to any power, Corn and Cob grinders, Straw, Hay and Fodder Cutters, Carry-log and Mill Screws; also manufactures Hoisting Machines, Hoisting Cranes, Pile Drivers, Turning Lathes and Steam Engines; and any kind of Machine, Model or Mill-work built to order. Any kind of Castings and Smith-work at the lowest prices. I warrant all Mills planned and erected by me to operate well. JAS. MURRAY,
Millwright, York near Light st. Baltimore.

Also for sale, Jas. Murray's patent separating Shellers, which shells and puts the corn in perfect order at the same time, for the mill or for shipping—Persons living near the city can bring with them one or two barrels of corn, and give the sheller a fair trial before purchasing.

He has also for sale, the following second hand Machinery: 2 pair 4 ft 6 in. French burr Millstones, with all the gearing; 2 pair 3 ft 6 in. French Burr Millstones, with all the gearing; and some Saw Mill work—the whole are good, and any or all of the above will be sold low. n1

AGRICULTURAL IMPROVED MACHINERY, PLOWS, &c.

The subscribers avail themselves of this medium to tender their thanks to their friends and the public generally, for their liberal patronage, and in support of their claims to its continuance, they offer to supply a general and complete assortment of the best AGRICULTURAL IMPLEMENTS and SEEDS, that can be procured—and upon terms which furnish a reasonable and liberal guarantee of satisfaction to purchasers.
sep 1 R. SINCLAIR, JR. & CO.

The "Simon pure," and invincible WILEY PLOW still in the field—A. G. MOTT, at No. 38 ENSOR STREET, near the *Bel-Air Market*—Manufacturer and Vender of Implements of Husbandry, viz. *Plows, Harrows, Cultivators, Grain-Cradles, Wheat-Fans, Corn-Shellers, Straw-Cutters*, Endless chain *Horse Powers, Threshing Machines, &c. &c.*—through this medium, would apprize the agricultural community of the fact, that he is the only manufacturer in the "Monumental city" of the GENUINE WILEY PLOW (right and left hand) composed of the real "simon pure" and justly celebrated New York composition, chilled castings, the points of which, are warranted to stand the most rugged soil equal to steel, at a cost of about *two cents* per acre, for blacksmith's bill.—If you are for bargains, call, or send your orders, for he guarantees his Implements good as the best, and cheap as the cheapest, *for Cash, and delivered in any part of the city free of charge.*

PLOUGHS AND PLOUGH CASTINGS.—J. S. Emmerson at his old stand, Pratt street, has for sale a good assortment of Ploughs, suitable for fall ploughing, viz: Davis' Improved 9 inch, and 9 inch Improved cast and wrought shears, do. do. 10 inch, do 12 inch or 3 horse.—Also, my Patent Cleazy self-sharpening Ploughs, 9, 10 and 12 inch—also, 10 inch Cleazy's Patent Improved Plough, and Snyder's Patent Ploughs, 10 inch right and left hand.—The same Plough works at pleasure, a wrought or cast share, or a cast share, thus easily suited to different soils—also on hand a large stock of Plough castings of various Patterns for wholesale and retail, together with Horse Powers, Threshing machines, Harrows and Cultivators, and his Patent Cylinder Straw Cutters, &c. &c., all at reduced prices—also, Landreth's Garden Seeds will be furnished to Gardeners by the pound, &c.

AGRICULTURAL IMPLEMENTS for sale at No. 7 Bowly's wharf, Baltimore, by WM. GAWTHROP & SON.
We offer to Farmers and Planters our Premium Double Corn Shellers, which have proved themselves to be the very best now in use—we have on hand one of the best selections of PLOWS in the state, the castings of which are the composition metal with chilled heels, points and edges; our plows embrace the Minor & Horton from 6 inch. to 12, so much used in the North, it is one of the lightest draught plows in use—we have the Wiley improved, and the old pattern of the N. York manufacture, which is known without comment. Also, the Prouty, Chenoweth, Self-sharpening, Davis, and all other kinds; Plow Steels and Points for all kinds of Plows; Fans, Straw Cutters, Corn and Cob Crushers, and all other kinds of Implements used in farming—we also keep all kinds of Field Seeds—we do a general commission business in Grain, Seeds and Country Produce. 7t

BOMMER'S METHOD FOR MAKING MANURE.—The subscriber has been appointed by Mr. Bommer, his agent for the Southern States, and will dispose of the Books, with the right to use them, for any sized farm, at $5 each. Address (post paid) m1 SAML. SANDS, office of "A. Farmer."

CONTENTS OF THE NOVEMBER No.

Work on the Farm	129	Sarsaparilla Beer, empty how to make	138
The Parsnip, culture of	131	Cure for the Caterpillar	"
Destruction of Sassafras, and application of Bone manure, by 'Montgomery Farmer'	132	Meteorological Table	137
Culture of Rice in France	133	Garden work for Nov.	138
Phila. Co. Ag. Fair	133, 134	Grape Culture	139
Ayrshires & Devons, description of by E. Phinney	135	Management of fruit trees	"
Impo'ed Leicester sheep, for Mr. Clay	137	R. Chisolm on do	140
Diseases in cattle, remedies for	138	Ladies department—Flowers	"
Ohio Tobacco,	"	Nov. work among Flowers	"
Grny's endless rack horse power	"	Cultivation of Bulbous roots	"
Virginia Lands	139	Sup'r mode of curing hams	141
Bucks Co. (Pa.) Agr. Soc'y Fair	"	Poetry—"To the wilderness"	"
Management of Stables	140	New way of washing clothes	"
The way to analyse soils	141	Field cultivation of the hop	"
Analyses of wheat, barley and oats, by C. W. Johnson	142	Do. of the Pea	142
The corn crop of Maryland	"	Cultivation and curing of Hops	"
Indian Corn in Eng.	143	Remington's Pneumatic Water Raiser and fire engine	"
Sinclair & Co's. 3 furrow plow	"	Do. Tobacco Press	"
John H. Craven on deep ploughing	144	Do. hot blast, smoke preventing, and Fuel saving Andirons	143
Notice of fine stock brought into Md.	"	Baltimore Market	"
Do. of Mr. A. Clement	"	ILLUSTRATIONS.	
Do. of ravages of the Hessian Fly	"	Sinclair & Co's 3 Furrow Plow	141
Crops of Eng. prospect of	144	Remington's Pneumatic Water Raiser, and fire-engine	142
J. S. Skinner in Mass'tts.	146	Do. Tobacco Press	"
		Do. hot blast, smoke preventing and fuel saving Andirons	143

The American Farmer.

The 2d volume of the new series of this journal commenced on the 1st of July, 1846—It is issued at the 1st of each month.

Terms:—Single copies $1—Six copies for $5—Thirteen copies for $10.—Thirty copies for $20.

Sample Nos. will be sent to any one desirous of aiding in the circulation of the "*Farmer.*"
Address SAMUEL SANDS,
122 BALTIMORE STREET, BALTIMORE.